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Grounding Interprofessional Education in Scholarship

Hugh Barr

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Contents

Abbreviation

CAIPE:	The UK Centre for the Advancement of Interprofessional Education
CETLs:	Centres of Excellence in Teaching and Learning
DEP:	Department of Employment and Productivity
DH:	Department of Health
DIUS:	Department for Innovation, Universities and Skills
HEFCE:	Higher Education Funding Council for England
HEIs:	Higher Education Institutions
InterEd:	The International Association for Interprofessional Education and Collaborative Practice
IPE:	Interprofessional education
JET:	The Interprofessional Education Joint Evaluation Team
NHS:	National Health Service
Nipnet:	The Nordic Interprofessional Network
QAA:	The Quality Assurance Agency for Higher Education
SHAs:	Strategic Health Authorities
UK:	The United Kingdom
WDC:	Workforce Development Confederation
WHO:	The World Health Organization

Commentary

i) Summary

The 18 papers submitted are a cross-section of my publications in interprofessional education (IPE) since becoming actively engaged in that field in 1989. They comprise four themes. Each is updated and complemented by additional conceptualisations. Together, they point to the need to: systematise relationships between stakeholders centrally; remodel IPE as a continuous cycle of learning and development; triangulate data from monitoring, reviews and evaluations to verify its evidence base; and establish IPE as a community of practice.

ii) Introduction

Revisiting the papers submitted provides an opportunity to reflect upon my contribution to the development of IPE during the past 18 years. The need to prepare this commentary instils an overdue discipline to establish coherent relationships between papers written at different times for different purposes and different readerships. IPE has become more varied in form, purpose and content during those years as it has been adopted and adapted for different fields of practice with different configurations of professions in different countries. Any attempt to impose a single set of structures would invite the riposte that 'one size does not fit all'. The need is rather for frames of reference within which to locate different approaches to IPE. This commentary suggests some of them within which earlier formulations in the papers submitted can be embedded.

iii) An Interprofessional Journey

My mission during the past 18 years, more by accident than by design, has been to play some part in energising, elucidating and coordinating activists in the UK and beyond as they have promoted and developed IPE between health, social care and other professions, in the belief that it will improve collaboration in practice and quality of care for individuals, families and communities. It has also, in more recent years, been to assemble with others the emerging evidence base for IPE (Barr et al., 2000 & 2005; Hammick et al., 2007; Zwarenstein et al., 2001 & in press) and draft guidelines based on best practice to improve methodological rigour in evaluating IPE (Freeth et al., 2005a&b).

These overlapping phases capitalised upon my prior experience as a long-serving Assistant Director of the former Central Council for Education and Training in Social Work (CCETSW) carrying the lead responsibility for research and development, including the oversight of early moves towards 'shared learning' with other professions. That experience was put to good use following an invitation in 1989 to direct a newly-established Centre for Interprofessional Studies in the School of Social

Studies at the University of Nottingham, leading to my appointment as Special Professor in Interprofessional Studies and my first IPE research projects (Barr, 1994a; Barr & Shaw, 1995). Opportunities followed nearer home in London as Research Coordinator and later Professor (now Emeritus) of Interprofessional Education in the School of Integrated Health at the University of Westminster and currently through visiting chairs in the same field in the School of Health and Social Care at the University of Greenwich, the Florence Nightingale School of Nursing and Midwifery at King's College London, and the Faculty of Health and Social Care Sciences at Kingston University and St George's University of London. The Presidency (formerly the Chairmanship) of the Centre for the Advancement of Interprofessional Education (CAIPE) provides a privileged overview of interprofessional developments throughout the United Kingdom (UK), complemented by a global overview leading and speaking at numerous international conferences, editing (now co-editing) the Journal of Interprofessional Care, editing the 'Promoting Partnership for Health' book series for Wylie Blackwell, serving on the Board of the International Association for Interprofessional Education and Collaborative Practice (InterEd) and, most recently, as a member of the World Health Organization (WHO) Study Group reviewing IPE and collaborative practice. Observations in this commentary draw upon these diverse experiences - verified and referenced where possible.

iv) A Field Ripe for Scholarship

Sustained efforts have been made during the past decade, notably in the UK, to establish IPE as a field of scholarly endeavour worthy of its claims to a place in the mainstream of professional education for health and social care. Freestanding examples of IPE can still be found, but it is now woven more often into the fabric of uniprofessional and multiprofessional education where it is subject to systematic approval internally by higher education institutions (HEIs) and externally by regulatory bodies, professional associations (including royal colleges) and the Quality Assurance Agency for Higher Education (QAA). Intervention by regulatory bodies and professional institutions safeguards profession-specific concerns. Intervention by the QAA safeguards broader-based academic and professional standards informed by benchmarking statements determined in consultation with those associations and leading to consensus between them (QAA, 2001). These organisations appoint teams of assessors to approve and review professional programmes, assessors who expect them to be grounded in theory and substantiated by evidence. Those expectations are reinforced by external examiners appointed by the HEIs to moderate students' work in accordance with standards and requirements for academic qualifications and professional awards.

Gone are the days when IPE could be regarded as an ephemeral predilection on the margins of professional education, immune from such rigours. It is now subject to the same academic pressures as the uniprofessional and multiprofessional programmes within which it is invariably incorporated. Exponents of IPE have responded with determination to secure its knowledge, evidence, theoretical and value bases, but progress has been painstaking in contested territory, dependent upon finding accommodation between practising professions and academic disciplines.

Pursuit of scholarship alone would, however, risk accusations of 'academic drift'. The Department of Health through NHS Strategic Health Authorities (SHAs) insists that IPE be 'fit for purpose', i.e. responsive to the exigencies of the service to develop a workforce that furthers the modernisation agenda. Tension between the expectations of academe and service agencies has to be managed.

v) The papers selected for submission

The 18 papers submitted are some of the many written assignments undertaken along my 'interprofessional journey' in response to the pressures to establish the academic and professional credentials of IPE. They comprise a cross-section of my publications in the field of IPE, chosen to maximise evidence of my contribution, but to minimise overlap, repetition and joint authorship. This commentary provides an overview within which the submitted papers are embedded and, where possible, updated with reference to subsequent work (by myself and others). Each theme includes at least one original conceptualisation. International perspectives inform most of the papers, but I focus for the sake of brevity and simplicity on England during a period of devolution and divergence between the four countries of the UK.

The papers are grouped into four interlocking themes and numbered in the order in which they first appear:

Theme A: **from instigation to implementation**
- establishing why, when, where and how IPE took root
- charting its development and incidence

Theme B: **from clarification to codification**
- defining and classifying IPE
- delineating its dimensions and reformulating them cyclically

Theme C: **from evaluation to verification**
- developing methodology to evaluate processes and outcomes in IPE
- reviewing evaluations

Theme D: **from conceptualisation to theorisation**
- identifying, comparing and grouping theoretical perspectives on IPE
- selecting a theoretical framework

Half the papers inform Theme A. The first is an overview of the development of IPE worldwide (paper A1). It provides the context for the second which is a more searching review of such developments in the UK (paper A2). The third refers to expectations for IPE in two seminal WHO reports with examples to illustrate how each has been implemented at home or abroad (paper A3). The fourth reports findings from a survey of IPE 'initiatives' reported in the UK (paper A4). The fifth (based on my professorial lecture at Greenwich) is a critique of government policies for NHS reform and their implications for collaborative learning and practice (paper A5), whilst the

sixth records how those policies were carried forward (paper A6). By way of contrast, the seventh offers a bottom-up perspective, with reference to stress in contemporary practice and ways in which interprofessional learning and practice may alleviate it (paper A7). The eight is a position paper commissioned by the Higher Education Academy (paper A8). So is the last in this section, prepared more recently as a backdrop for an international/interprofessional conference in London (paper A9).

Five papers inform Theme B. The first sets out alternative structures to build IPE into professional education (paper B1). The second formulates outcomes from IPE as competencies in terms comparable to those being adopted at the time of writing throughout professional education (paper B2). It complements the third (paper B3), which floats a typology of IPE with predicted outcomes, subsequently incorporated into systematic reviews. The fourth (paper 4) develops approaches to interprofessional teaching and learning touched on in the third. The fifth is somewhat different (paper 5). It was presented in response to a challenge to demonstrate the relevance of IPE to communitarian approaches to health improvement on the North American Indian tribal reservations. It calls on examples of interprofessional intervention in desperately deprived neighbourhoods in developing but also developed countries. In so doing, it introduces perspectives on IPE which may be new to some western exponents, but grounded in third world experience associated with community/campus partnerships and community development.

Two papers inform Theme C. The first is review of evaluations of IPE in the UK (paper C1), which complemented a systematic review of such evaluations worldwide (Barr et al., 2005). The second draws on the experience of those reviews to help others evaluate their IPE initiatives (paper C2).

The remaining two papers inform Theme D. Both were written to widen understanding of IPE. The first provides the jumping off point for the fullest discussion in this commentary (paper D1). It groups theoretical perspectives on IPE in relation to its reported outcomes. The second (paper D2) explores the value base for IPE on which much work remains to be done within the emerging theoretical framework favoured at the end of the section.

vi) The methodologies employed

Some of the papers submitted are critical commentaries. Two of them (papers A2 & C1) include critiques of methodologies employed by others and a third (paper C2) guidance for the application of evaluative methodologies in IPE. Others demonstrate my own call upon a range of methodologies from prior experience, applied and developed in the interprofessional context. They include documentary research (papers A1, A2, A6 & A8), survey methods (paper A4) and case studies (papers A3, A7 and B3). Systematic review methods were new territory for me developed with colleagues (Barr et al., 2005). The review submitted (paper C1) stops short of being systematic, but falls within a rolling programme of work that broke new ground in adapting and developing systematic review methodology.

vii) The Four Themes

- from instigation to implementation

IPE 'initiatives' were first reported in Canada, the UK and the United States in the late 1960s (see paper A1) without reference to each other. Innumerable accounts followed of initiatives in North America and Northern Europe with some in Australasia. Accounts from other countries were few and hardest to track down in developing countries where lack of resources constrained evaluation and publication.

Early initiatives were characteristically isolated, local, ephemeral and 'bottom-up', although some in the UK (see paper A2) enjoyed support and encouragement from an alliance of regulatory and professional bodies centrally. Nationally-led rolling programmes began to develop as IPE moved beyond introspection about interprofessional relations towards engagement in health promotion and service improvement.

Successive reports from the WHO during the 1970s had called for reforms in health professions' education, as documented by Tope (1996), leading to its seminal proposals for "multiprofessional education"[1] (WHO, 1988). No one initiative could reasonably be expected to meet all the objectives set by the WHO in that report, but paper A3 gives examples for each.

Paper A4 takes stock of developments in the UK. Paper A5 and A6 trace the formulation of UK policies informing the development of IPE. By way of contrast, paper A7 offers a grassroots perspective on stresses inherent in contemporary health and social care practice and the means by which IPE may help to alleviate them. I was commissioned by CAIPE (Barr, 1994a), the UK Central Council for Nursing, Midwifery and Health Visiting (Barr, 2000) and the Higher Education Academy (Barr, 2002) to review developments. The last of these is submitted as paper A8 followed by an article to provide a more up-to-date picture (paper A9).

Reports from the central government prior to 1997 mainly focused on improving collaborative practice without reference to ways in which education might be invoked as a means to promote it. Judicial inquiries into child abuse[2] spearheaded calls for 'joint training' in the belief that it would improve communication and trust between practitioners from different professions, reinforced by reports from regulatory bodies and special interest groups (paper A2). Reported IPE initiatives in child protection were, however, few relative to the number in primary health and community care (paper A4)[3].

Pressure in the UK to promote 'common learning' built up from 1997 onwards following the election of the Labour government and became a central plank in its

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[1] Multiprofessional education as used by the WHO at that time equates with interprofessional education in this commentary.

[2] Also failures in aftercare for discharged ex-patients from psychiatric institutions resulting in tragedy.

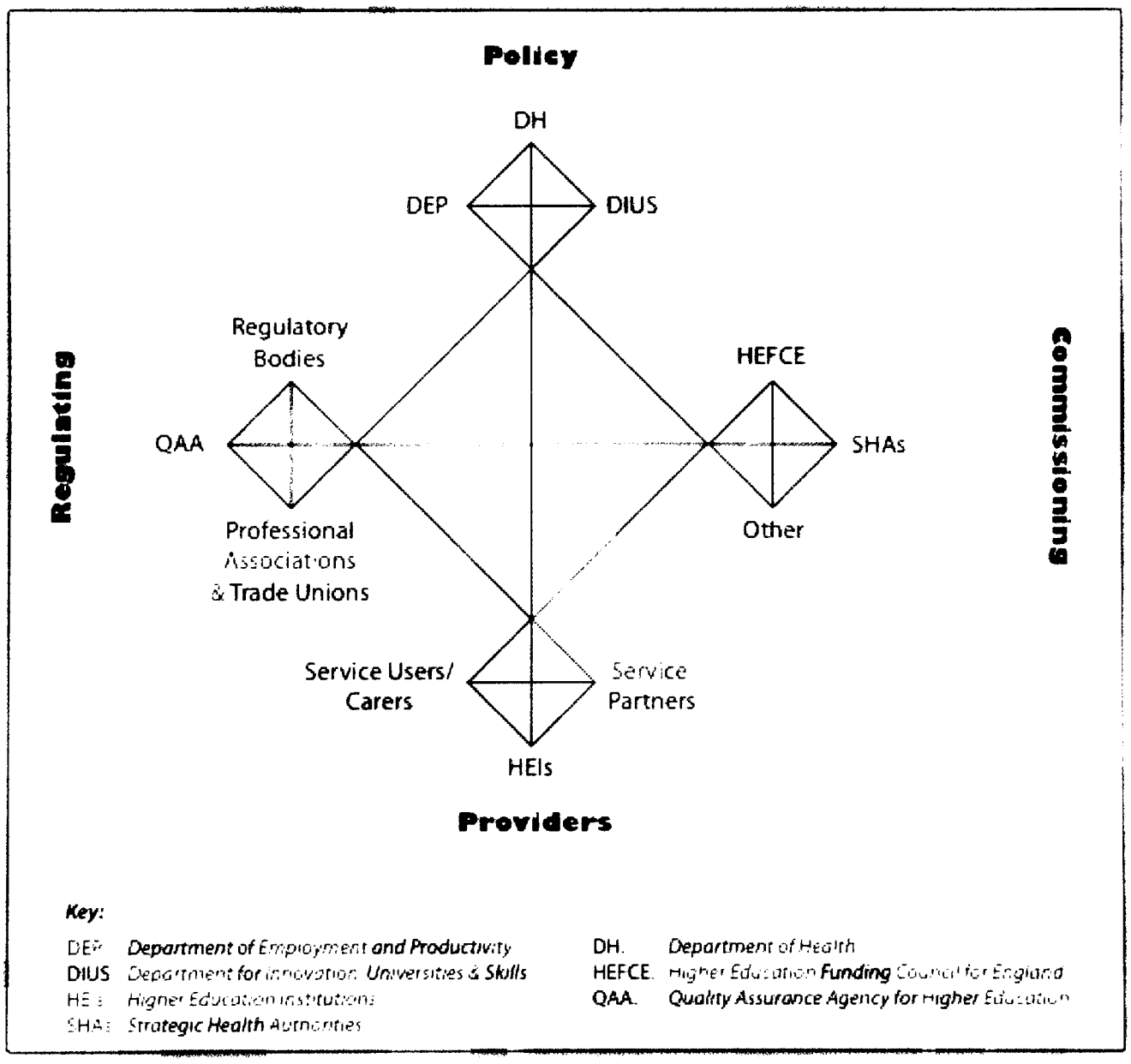
[3] The imbalance may be partly explained by the surveys' methodology.

health and social care policies, not only to improve collaborative practice, but also to remodel the workforce as part of the modernisation agenda and to enlist the rising generation of health and social care professionals as agents of change (Department of Health, 2001 a&b; 2004 a&b). Common curricula would lay foundations of common understanding and competence to facilitate flexible working, threatening comparative learning enshrined in IPE and specialist learning for each profession (Paper A8).

Depending upon your point of view, common learning was either built on the experience of IPE, or a radical departure. Either way, IPE was becoming confused, despite the efforts of its exponents to clarify terms and concepts, giving renewed credence to those of its detractors who professed themselves unable to grasp its essentials (paper A8).

Implementation of policies for IPE (or common learning) depended upon collaboration between stakeholders nationally, regionally and locally, which I present in Figure 1.

Figure 1: Relationship between Stakeholders in IPE



This figure locates policy formulation, educational provision, commissioning and regulation at four corners of a diamond, connected by six lines of communication. Each corner has three key stakeholders who comprise a subsystem with their own lines of communication:

Policy formulation: central government - the Department of Health (DH) with lead responsibility for health and social care education and practice[4]; the Department of Employment & Productivity (DEP) as the driving force behind the skills-based vocational training; and the Department for Innovation, Universities & Skills (DIUS) with overall responsibility for education.

Educational Provision: HEIs mounting professional and interprofessional education programmes; service agencies as their partners providing practice placements; with service users and carers as active participants.

Commissioning: HEFCE funded programmes; SHAs and local authorities funding students informed by workforce strategies commended by Skills for Health and Skills for Care; and separate arrangements for medicine and dentistry.

Regulation: the QAA setting academic and overall professional standards[5]; professional and regulatory bodies setting profession-specific standards; and trade unions safeguarding the interests of their members

HEIs reconciled, as best they could, differing expectations nationally for professional and interprofessional education (Barr, 2002), while their teachers turned in growing numbers for support from three of the Higher Education Academy subject centres[6] and many of the Centres for Excellence in Teaching and Learning (CETLs) (Higher Education Academy, 2007)[7].

The Department of Health stressed the importance of regional and local partnerships to promote and develop pre-registration 'common learning sites' (paper A6). One or more HEI has joined forces, in each case, with service delivery agencies (typically NHS

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[4] Staffing cuts in the Department of Health have curtailed its direct intervention in professional and interprofessional education for health care, prompting it to rely more on the SHAs and 'Skills for Health' (with 'Skills for Care' in parallel) to implement its policies.

[5] The influence of regulatory and professional bodies has waned as that of employers and educational commissioners has waxed notwithstanding the consensus achieved across professions during phase one of the preparation of the QAA benchmarking statements as standards to be attained by pre-registration programmes. The Department of Health and 'Skills for Health' seem to have been less enthused, confirmed when took steps to reinforce employment representation on the reconstituted QAA group charged with the task of taking further the harmonisation of the benchmarking statements (QAA, 2006).

[6] They are health sciences and practice; medicine, dentistry and veterinary medicine; and social work and social policy.

[7] Funded by HEFCE.

trusts, local authority social services departments and independent organisations) with WDCs (later SHAs) as the principal funding source.

Application of the model has necessarily taken many forms, depending upon topography from sparsely populated rural regions, at one extreme, to metropolitan counties and segments of London, at the other. It has had to take into account historically and accidentally determined distribution of education programmes for the various health and social care professions between faculties or schools within the same and different HEIs in the same and different cities. Paper B1 identifies three models that have been adopted to bring their curricula together at the pre-registration stage (with three more at the post-registration stage).

Sustainability is problematic. For example, in south east London a complex multi-university programme is in abeyance, after being found to be too time-consuming and too difficult to manage. In Southampton and Portsmouth bussing students between universities in the two cities has ceased on grounds of logistics and cost. Over complex formulae for collaboration, it seems, cannot be sustained (Hudson, 1998). Nor can it be assumed that IPE once established will survive. To assert that IPE is now safe in the mainstream of higher education would be to assume that the case for its introduction has been made beyond question, that its academic credentials are secure, that its relatively high costs will be met even when training budgets are cut, that all HEI managers are firmly on side and that new appointees will always be sympathetic.

The radical solution remains to be confronted, namely relocation of professional educational programmes for health and social care between HEIs. The case for relocation becomes compelling to secure more economic, more efficient, more effective and better integrated provision as multiprofessional and interprofessional education become more lasting and more pervasive. But experience in Sheffield is a warning of the tensions that can be generated and their adverse impact on IPE. Relocation there of SHA resources, and hence student numbers for nurse education between the two universities, deprived one of them of pre-registration nursing student and put an end to joint IPE programmes. Co-location of programmes for nursing, allied health professions and social work without including medicine may be divisive and reinforce institutionalisation into two educational tiers.

IPE developments have been the subject of reviews commissioned by government and others (paper A2). Some commissions stipulated the need to establish the incidence of IPE, although few of the reviews actually did so. Reasons were not volunteered, but the most likely explanation was that the researchers found systematic identification and quantification of initiatives inherently difficult when IPE was known by a variety of names, respondents were prone to adopt their own definitions, and IPE was often woven imperceptibly into the fabric of professional and multiprofessional education.

CAIPE commissioned two surveys (Shakespeare et al., 1989; Barr & Waterton, 1996, paper A4). A rich seam was mined indicative of the diverse range of IPE throughout all parts of the UK, but neither survey had sufficient resources to solicit data from more than a limited number of respondent groups. Competing claims on resources allocated for the second survey prevented plans to follow up non-respondents. That

accounted, in part, for a lower response rate than for the first survey, rendering comparison between findings invalid.

The second CAIPE survey concluded that methodological and resource constraints prompted questions about dividends from future surveys relative to cost. Available funds might be better invested in qualitative research into selected IPE initiatives. Despite two further surveys (CVCCP, 1997 and CAIPE as summarised in paper A2), obtaining reliable and up-to-date data remains problematic. Attempts to maintain running records of IPE initiatives on websites have been defeated by resource constraints.

- from clarification to codification

Notions of 'joint training' invited diverse interpretation, compounded by a plethora of seemingly more sophisticated terms. Commentator after commentator introduced their own into the "terminological quagmire" (Leathard, 1994, 5) with scant regard for others already enjoying some currency. The more IPE (by whatever name) extended into different fields and countries, the more pressing the need became for an agreed definition.

The WHO (1988) employed the term 'multiprofessional education' to complement profession-specific learning to acquire the skills necessary for solving the priority health problems of individuals and communities (see paper A3).

Consistent with its name, CAIPE (1997) commended the term 'interprofessional education' and endorsed the definition that I had drafted for it:

> *Occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of care.*

The need had become pressing to distinguish IPE from other forms of joint training or shared learning with which it was often confused and in which it was often embedded. CAIPE therefore defined multiprofessional education as:

> *Occasions when two or more professions learn side by side for whatever reason*

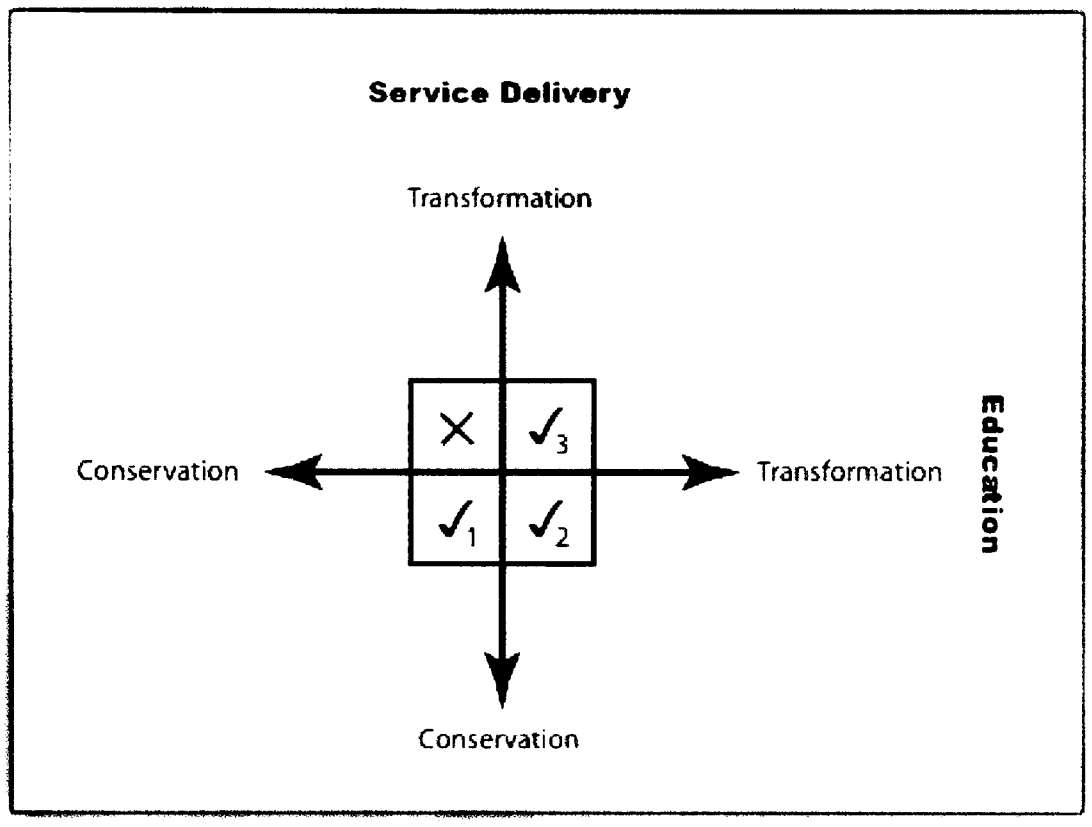
Viewed thus, IPE was a sub-set of multiprofessional education, but with a permeable boundary where each could grow out of the other. The CAIPE definition for IPE has gained worldwide currency, but an overarching classification of types of IPE has yet to be formulated. Its utility would, in any case, be dependent on the purpose for which it was intended. The papers submitted distinguish between different models for incorporating IPE (paper B1), competency-based outcomes (paper B2) and the relationship between means and ends (paper B3) refined and tested later against findings from a subsequent systematic review (Barr et al., 2005), and learning methods (paper B4).

That review distinguished between three foci for IPE - individual preparation, team development and service improvement. My colleagues and I were however, at pains to

explain that findings from such a review (and hence any classification derived from it) were likely to be atypical of IPE in general. I have since introduced a fourth focus - community development - found in the IPE literature, but not yet subjected to sufficient evaluative rigour to qualify for inclusion in a systematic review (paper B5).

Preparation of this commentary prompts me to revisit my earlier attempts to classify IPE (paper B3). The first of two models is simple and basic (Figure 2), comprising two dimensions, each constituting a continuum of change from conservative to transformative[8].

Figure 2: Educational and service delivery dimensions of IPE.



Both extremes on both dimensions have no place for IPE. The extreme conservative position on the educational continuum preserves and protects uniprofessional education within pre-existing programmes to the exclusion of IPE which may be perceived as threatening or destabilising. The extreme transformative position on that continuum replaces uniprofessional programmes by a supra-system of pan-professional education, rendering IPE redundant.

The extreme conservative position on the service delivery continuum puts preserving and protecting pre-ordained professional identities, roles and demarcations before the need to improve interprofessional relationships which might threaten or disrupt them.

The extreme transformative position on that continuum sees remodelling the workforce and services as primary, improving collaboration as secondary or transitory. Collaboration, insofar as it is mentioned, equates with give and take in response to the exigencies of service delivery for flexible deployment, blurring and crossing professional boundaries unconstrained by sensitivities and legalities about professional roles.

[8] Transformative is used here to refer to transformation of role, not of person as per Mezirow (1991).

The conservative extremes represent residual resistance to interprofessional learning and working. The transformative extremes represent the radical reforms in both education and service delivery originating in the recommendations of the Schofield committee (Schofield, 1995), reinforced by proposals to extend national vocational qualifications (NVQs) for health and social care to professional level (Barr, 1994b) and later legitimised in the 'knowledge and skills framework' formulated by Skills for Health (paper A6). Neither Schofield's recommendations nor plans for the upward mobility of NVQs were implemented, but the knowledge and skills framework remains on the table to inform work to remodel the workforce in, for example, public health (Skills for Health, 2007).

Introduction of foundation degrees for health and social care activated that framework with some programmes designed to respond flexibly to the workforce needs of local employers, without reference to pre-existing professions and occupations. Conceived like NVQs before them at the paraprofessional level, programme providers and graduates are exerting upward pressure; the line between paraprofessional and professional strata can no longer be held.

Tension between these conservative and transformative extremes is institutionalised between professional and regulatory bodies, on the one hand, and commissioning bodies, on the other (see Figure 1 above). IPE occupies the middle ground on both continuums, in contested territory, holding the tension as it is pulled in contrary directions by conservative and transformative forces.

Three of the four quarters in figure 2 equate with the three foci formulated by Barr at el al. (2005) and can be summarised thus[9]:

1) Preparing for collaborative practice, but preserving and protecting predetermined professional identities, roles and demarcations;

2) Preparing for collaborative practice, where others in the interprofessional team authorise and enable the practitioner, within the constraints of law and policy, to carry responsibilities beyond those predetermined for his/her profession;

3) Learning together whilst effecting quality improvement and instigating change in service delivery.

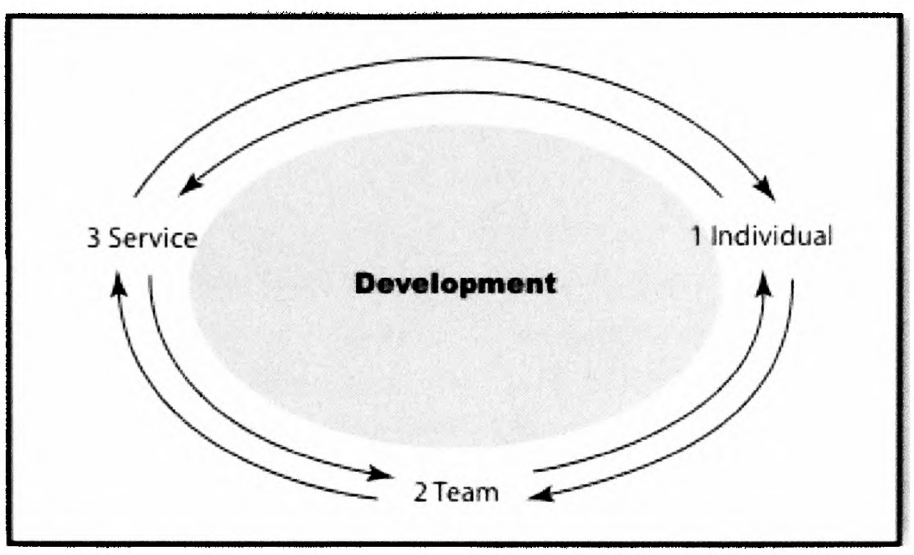
The first focus is typical of much university-led IPE at the pre-registration stage, constrained by external regulation and scrutiny of professional programmes and mindful of the contractual obligations that each HEI has towards each of its students. The second focus should arguably be more firmly established at the pre-registration stage than seems to be the case (Barr et al., 2005; Miller et al., 2001). It is more in evidence at the post-registration stage, whether in work-based development or in those multiprofessional education programmes that prepare students for new models of care, e.g. in mental health. Similarly, the third focus is more common at the post-registration stage, for example in work-based continuous quality improvement (CQI)

[9] The fourth is left blank based on the premise that conservative IPE cannot contribute to transformative service delivery.

projects or innovative university-based programmes. Notwithstanding arguments that future professionals should be motivated and equipped to be agents of change, the feasibility and desirability of going beyond a critical appreciation of practice is questionable at the pre-registration stage.

Each focus can stand alone, but can, with advantage, be viewed as mutually reinforcing. This suggests a cyclical model with three entry points (see Figure 3), progressing clockwise or anti-clockwise.

Figure 3: A cyclical model of IPE



- from evaluation to verification

Pressure to assemble evidence underpinning claims made for IPE built up during the late 1990s at a time of mounting concern to establish the evidence-base, not only for professional practice, but also for professional education (Hargreaves, 1996). The first of three international conferences entitled *All Together Better Health* (held in London in 1997 for which I had lead responsibility along with the third in 2006) seemed an ideal opportunity to focus on the effectiveness of interprofessional practice and IPE as a means to promote it.

Two propositions were put:

- That interprofessional practice improves the quality of care
- That IPE improves collaborative practice

Distinguished scholars were invited from both sides of the Atlantic to address these propositions (Leathard, 1997). Outcomes fell short of expectations which, with benefit of hindsight, were naïve although some progress was made in reframing questions and mapping territory. The answers, it became painfully clear, were going to be more complex than the propositions. There would be no 'quick fix'.

Most UK IPE initiatives had reportedly been evaluated (paper A4), but documentation was sparse and publications lacking, while a few rigorously conducted evaluations were cited repeatedly (paper C1). Overviews of IPE developments were illuminating, but invariably stopped short of providing examples which might have augmented the

small pool of published evaluations. Protecting the anonymity of sources was deemed to be good practice[10].

Neither isolated evaluations nor occasional reviews were enough. Sustained and systematic searches were needed to track down evaluations that would provide a baseline for future policy, pointers for future evaluations and verify or vitiate claims made for IPE. Systematic reviews were beginning in health care practice, notably under the auspices of the Cochrane Collaboration. These developments prompted a number of UK researchers (myself included) to explore the application of that methodology to determine the efficacy of IPE. Approaches to Cochrane received an encouraging response and a review group was established under its Effective Practice and Organisation of Care Group (EPOC) with Merrick Zwarenstein (then with the South African Medical Research Council) as mentor. Criteria for the review that followed focused narrowly on direct benefit to patients attributable to an IPE intervention and evaluations constituting randomized controlled trials, controlled before and after studies, or interrupted time series studies. None were found despite an exhaustive search of over a thousand abstracts and scrutiny of 89 papers (Zwarenstein et al, 2001). Disappointed, the Cochrane Group seemed at first to be faced with a choice between abandoning its search, or repeating the review after an interval in accordance with its obligation to the Cochrane Collaboration and in the hope of finding more.

That review was repeated (Zwarenstein et al., in press), even though most members of the Group had become increasingly ill-at-ease with Cochrane's linear and positivist approach. Their own research had heightened their awareness of alternative paradigms - qualitative as well as quantitative - for the evaluation of education. They determined to conduct a further systematic review taking into account a continuum of outcomes and a range of research methodologies. The group was reconstituted as the Interprofessional Education Joint Evaluation Team (JET), with some changes of membership and a new review undertaken. Its report (Barr et al., 2005) was built around the 107 robust evaluations found, which met quality checks for presentation and rigour. Limited though the findings were, the report seemingly succeeded in putting to rest recurrent criticism that claims made for IPE lacked evidence. A follow up study (Hammick et al., 2007) adds more recent evaluations, imposes a higher threshold and organises data by precept, process and product (Biggs, 1993; Dunkin & Biddle, 1974).

A UK review (paper C1) was undertaken along the way, funded by the British Educational Research Association. It was less systematic than the three reviews above, but benefited from the team's intimate knowledge of IPE initiatives in the UK. The outcome was the presentation of 19 qualitative case studies with a commentary. The earliest of these dated back to the 1970s. Evaluations had been conducted mostly by the teachers with uneven rigour and limited impact, in isolation and without reference to other such evaluations. There are, however, signs that these defects are being remedied. More evaluations are being conducted in the UK, more often published, with more cross-communication and more rigorous methodology, encouraged

[10] This was questionable with reference to publicly funded education mounted by public institutions. Many HEIs, in my experience, would have readily given permission in a spirit of openness and exchange. Indeed, some published named reports later.

perhaps by the availability of guidelines (see paper C2 and Freeth et al., 2005 a&b). They include an independent evaluation (Miller et al., 2006) of four pre-registration 'common learning pilot sites' funded by the Department of Health. Each site also conducted its own internal evaluation leading to numerous papers and a composite publication (Barr, 2007, from which chapter one is submitted as paper A6).

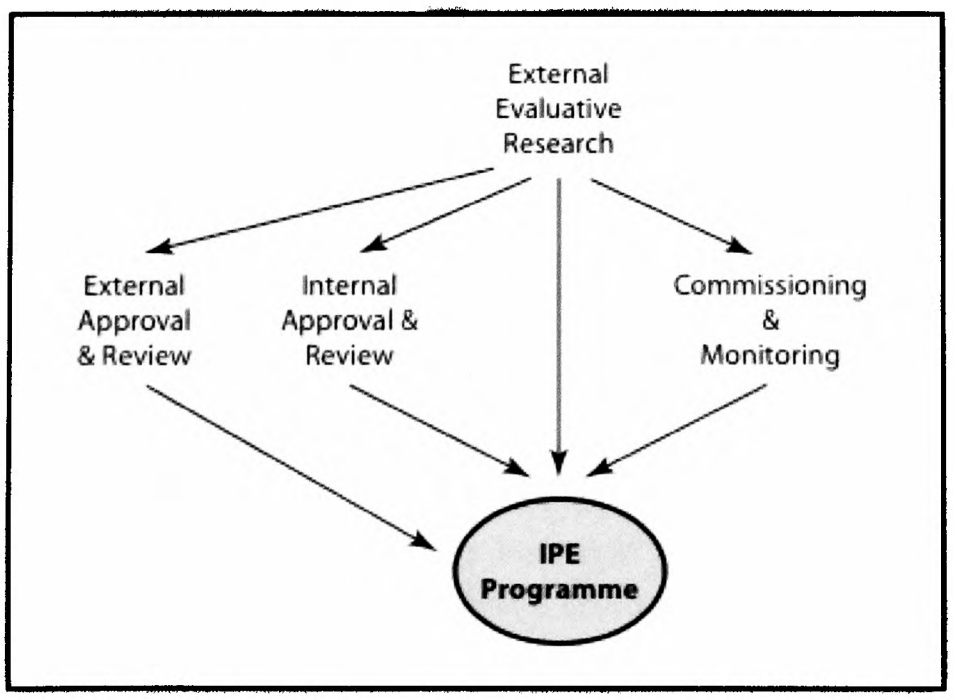
Ongoing monitoring by JET confirms that the number of robust evaluations of IPE is increasing and improving in quality. Encouraging though that is, reliance on relatively few evaluations is less than satisfactory.

Progression (some may say regression) from the Cochrane to the JET reviews prompts questions about the efficacy of different research paradigms to evaluate education in general and interprofessional education in particular. Protestation that IPE lacked evidence of effectiveness seems to have lessened since the first JET report was published, although arguments for linear, quantitative and positivist evaluation persist (as restated at the time of writing in objectives for a major North American interprofessional conference - www.ipe.umn.edu).

Researchers may debate hierarchies of evidence according to the credence of different research paradigms, including their implications for IPE (Page & Meerabeau, 2004). Meanwhile, policy makers may give more weight to feedback on the progress of IPE that they commission, educational managers to outcomes from internal reviews or external reviews on behalf of the QAA, and teachers to external reviews by their respective professional bodies.

Evidence from these sources is held in tension, a creative tension that needs to be acknowledged and institutionalised between the parties to inform negotiations about programme improvement. Internal and external review processes, criteria and outcomes need therefore to be transparent and exposed to the same critical scrutiny as published research and funds invested accordingly (see Figure 4).

Figure 4. Triangulating the evidence base for IPE



Notwithstanding the accretion of more and better systematic research-based evaluations, the time is still far off when evidence derived from them alone will be sufficient to verify the effectiveness of IPE. Triangulation may therefore be helpful to

relate findings from such evaluations, from commissioning and monitoring, and from internal and external approval and review.

- from conceptualisation to theorisation

Efforts to codify, classify and conceptualise IPE are open to the objection that they 'package' it prematurely, inhibiting imagination and innovation, and denying its innate complexity. I have been mindful of those dangers throughout, but the positive reception that earlier formulations received (e.g. Barr, 1994a) encouraged me to believe that the search for a semblance of order was welcome and the risks worth taking. The papers submitted include several attempts to codify aspects of IPE. This commentary has added more, as have others (see, for example, Howkins & Bray, 2007).

IPE was long regarded as light on theory. The introduction of theoretical perspectives has, however, gained momentum as IPE has been integrated into professional programmes within the mainstream of higher education. Teachers have searched for ways in which they can understand IPE by calling upon theoretical perspectives from disciplines contributing to professional education in their respective fields. Those efforts may contribute in part to the acceptance of IPE in higher education, giving it credence in the professional fields from whence the theoretical perspectives come, enabling teachers from the relevant discipline to contribute intelligently to IPE and instilling rigour into the design, delivery and evaluation of IPE programmes.

Pre-registration programmes, if and when grounded in theory, tend according to Cooper et al (2001) to adopt a single perspective. For example, Carpenter and McMichael (paper A8), at much the same time but unbeknown to each other, applied contact theory to the design and evaluation of IPE. In naïve form, that theory held that bringing groups together was enough to reduce hostility - overcoming ignorance and prejudice, relinquishing negative stereotypes, but from the outset Allport (1954) argued that contact was not enough to achieve those ends. Conditions had to be met: equality of status; common goals; co-operative learning; and institutional support. Evaluations of IPE (Barnes et al, 2000; Carpenter, 1995; Carpenter & Hewstone, 1996; McMichael & Gilloran, 1984) have measured attitudinal change between groups taking into account whether these conditions were satisfied (see also Hewstone & Brown, 1986; Dickinson & Carpenter, 2005).

The attractions of contact theory in IPE are many. It complements principles of adult learning which have been widely adopted in IPE and incorporates interprofessional values (paper D2). It acts as an antidote to interpretations of IPE that imply that common learning and didactic teaching is enough without comparative and interactive learning (see above). It is more apposite where IPE focuses on the modification of attitudes and perceptions between professions and in teams than at first sight when IPE focuses on organisational change and service improvement. Less apposite, that is, until account is taken of the adverse impact that change can have on relationships between the parties, where defensive reactions may impede progress. Viewed thus, IPE needs always to be designed in accordance with the requirements enshrined in contact theory to sustain and, when necessary, repair relations between

the participant professions. But to conclude that contact theory alone serves as a sufficient foundation for IPE would be to go too far.

A single theory can, as contact theory exemplifies, illumine the relationship between process, context, content and outcomes for particular types or facets of IPE. No one theory can, however, do justice to the complexity and diversity of IPE. One-off theories, drawn from a single academic discipline or practising profession, sit uneasily in IPE where curricular development endeavours to value, incorporate and reconcile perspectives from each participant profession.

Opting for inputs from a single profession neglects opportunities to compare theoretical perspectives that inform interprofessional practice or learning. For example, understanding of social defences as responses to stress and therefore impediments to collaborative practice (Menzies, 1970, a dynamic psychologist) bears comparison with a more complex theoretical perspective, relational awareness theory, espoused by Drinka & Clark (2000) (social psychologists) which illuminates ways in which different members of a team modify their behavioural styles under stressful conditions. To take another example, arguments (see above) by Hewstone & Brown (1986) (social psychologists) that it is the quality of learning that modifies identity bear comparison with those by Bourdieu (a sociologist) (Bourdieu & Passeron, 1990) that it is its duration that instils 'habitus'[11]. Seemingly diverse theories can be invoked, not only to shed light on IPE from different perspectives, but also as a step towards establishing a coherent rationale for IPE. But there are dangers if and when schools from the same discipline, e.g. behavioural, dynamic, educational, social or occupational psychology, are introduced into IPE without first establishing their differences and testing their application for different professions.

Each of the theoretical perspectives introduced into IPE has its antecedents. Theories from education are perhaps the most pervasive, benefiting from the widespread application of principles of adult learning in professional education carried over into interprofessional education. Dynamic psychology owes its introduction into IPE in the UK to the influence of the Tavistock Centre through the pioneering work of the Marylebone Centre Trust influenced by Schon (1983, 1987) from the US in parallel with Hornby in the UK (Hornby & Atkins, 2000) and interweaving anthropological perspectives (Beattie, 1995). Social psychology came in through the work of Carpenter in Bristol, and McMichael in Edinburgh, complemented by Drinka & Clark (2000) from the US and a growing preoccupation with the application of identity theory (see, for example, Whittington, 2005). Meanwhile, sociology was illuminating the nature of professionalism and relations between professions (paper D1) although its application to IPE was less evident in the UK than in Scandinavia where the work of Bourdieu has had some impact (see, for example, Almas, 2007).

Paper D1 assembles a range of theoretical perspectives to open up discussion and encourage others to contribute. Theories are grouped under the three foci that characterise IPE examples included in the systematic review, i.e. individual preparation, teamwork and improving the quality of care (Barr et al., 2005). These

[11] As defined by Mauss (1934), habitus includes the totality of learning habits, bodily skills, styles, tastes, and other non-discursive 'knowledges' that may be said to 'go without saying' for a special group.

same groupings are built into the interprofessional learning cycle (Figure 3), but additional theoretical perspectives introduced in more recent sources merit inclusion.

Colyer et al. (2005) edited papers presented at a special interest group on theories – mainly from social psychology - informing interprofessional teaching and learning. Dickinson & Carpenter (2005) expound contact theory, leading into identity theory picked up by Whittington (2005) who extends the discussion to include discourse in the construction of identity (Foucault, 1983) and the understanding of discourse in interprofessional relations. Martin (2005) and Hammick (1998) suggest that interprofessional curricula exemplify Bernstein's (1971 & 1996) concepts of integrated code and regionalisation of knowledge producing new discourses. Martin also introduces numerous socio-cultural learning theories to lay foundations for an epistemology of interprofessional pedagogy, concluding that situated learning during the practicum is the keystone of interprofessional theory (Lave & Wenger, 1991).

For Adams (2005), theory offers a conceptual framework that explains but in so doing reduces and simplifies aspects of the social world in which it occurs, often foundering in the contingencies of practice. Cooper and her colleagues, in similar vein, doubt the practicability of my prosaic suggestions for a general theory of IPE (paper A8) based on:

> *"the application of principles of adult learning to interactive, group-based learning, which relates collaborative learning to collaborative practice within a coherent rationale informed by understanding of interpersonal, group, intergroup, organizational and interorganizational relations and processes of professionalization".*
>
> (Barr 2002 as cited by Cooper et al., 2004, 182)

Complexity theory, for Cooper and her colleagues, promises to provide IPE with a coherent theoretical foundation which might help to understand, if not resolve, "the theory versus practice conundrum". For them, IPE operates on "the edge of chaos". It prepares practitioners to work in complex systems by prioritising the developments of skills that promote survival and adaptation, resisting pressure to force it back into "a linear straitjacket" and setting aside predetermined statements of outcome (Cooper et al., 2004, 182).

Their rhetoric overstates, for me, the extent to which IPE exponents rely on linear and positivist explanations. It fails to acknowledge movement in recent years in the direction that they exhort, dismissing attempts by others to formulate a theoretical framework for IPE from which consensus may yet come, and employing confrontational language that sits uncomfortably in any discourse about IPE. Price (2005) avoids those pitfalls, offering a more dispassionate but less challenging perspective on complexity (as distinct from complexity theory) in interprofessional education and practice.

D'Amour & Oandasan (2005, 9) commend 'interprofessionality' as an emerging concept into which other North American writers introduce theoretical perspectives. They agree that interprofessional processes are inherently complex, since they involve human interactions in a changing environment, but seek a way through by distinguishing between learner and patient-centred outcomes. Interprofessionality springs, they say, from the preoccupation of professions to reconcile their differences

through continuous interaction and knowledge sharing. It depends for its success upon an understanding of interdependence between interprofessional education and interprofessional practice at interpersonal, organisational and systemic levels.

D'Eon (2005) suggests that cooperative learning, characterised by positive interdependence, face-to-face interaction, individual accountability, interpersonal and small-group skills, and group processing, is effective in team learning. For him, experiential learning, citing Kolb (1984), is a planned, purposeful and cyclical step beyond cooperative learning.

Clarke (2006 citing Lewin, 1951) reminds his readers that there is nothing as practical as a good theory. He distinguishes between the application of theory in instructional practice and facilitation of research. He commends cooperative, collaborative and social learning generated during exchange between the learners, associated with professional judgement and recognition of the social construction of knowledge within professions. Citing Kolb (1984), he commends experiential learning as a conflict-filled process out of which the development of insight, understanding and skills comes. Each profession, says Clarke, has its cognitive or normative map derived from the process of professionalisation. IPE entails the decentring of knowledge (Dahlgren, 2006 citing von Glasersfeld, 1997) to become aware of points of view other than one's own.

Once light on theory, IPE is now sinking under its weight! That may not matter if applying theory to IPE is regarded as an esoteric pastime for a minority of academics on the margins of policy implementation. It becomes problematic if and when it prompts policy makers to conclude that theory is being used to obscure or frustrate their intentions. Much depends upon which of the above formulations is presented. Clarke speaks to fellow teachers and researchers, not to policy makers. Cooper and her colleagues present IPE as the means to equip students with a survival kit for a complex and uncertain world resulting from policies rather than to further their implementation. In contrast, D'Amour and Oandasan address the need for IPE to effect the implementation of policy. Strengthening links between theory and policy remains critical to secure effective working relations between academics and policy makers.

The above discussion has moved away from the search for a single theoretical perspective applicable to all IPE, and acceptable to all its exponents, towards finding a unifying theoretical framework within which a range of perspectives can be incorporated. Cable (2000) invokes the concepts of 'situated learning' and 'community of practice' (Lave & Wenger, 1991) to provide such a framework for his doctoral thesis about the preparation of medical and nursing students for collaborative practice.

For him, Lave & Wenger offer an analysis which takes as its focus the relationship between learning and the situation in which it occurs, a framework of social participation (Cable, 2000, 56-58). The reification of social process and structures, he argues, becomes untenable as these are constantly changing and being changed by the process of performance or social engagement. Learning and performance cannot be separated; learning is performance and the meaning of the activities that occur is a constantly negotiated and renegotiated interpretation of those held by all the participants of the world in which they practice. It is the community of practice that learns, not simply the individual.

Situated learning has many attractions for IPE: its location in the process of co-participation; its call on a shared repertoire of communal learning resources; its engagement with complexity; and its facilitation of change. It accommodates, but also tests, the compatibility of theories that have a place in IPE, e.g. activity, adult learning, co-operative, discourse, experiential, organisational, reflective practice, social constructivist and systemic theories (as variously discussed above and in paper B2). I nevertheless have reservations.

The notion of 'community of practice' is unhelpful if and when it is invoked to support arguments that the only effective interprofessional learning is in the workplace, leaving students to reconcile, as best they may, situated learning in practice with 'canonical learning' in the classroom, whilst letting university teachers off the interprofessional 'hook'. Such an interpretation of community of practice is divisive, but given credence by Lave & Wenger when they opt to focus on learning in working life, drawing analogies with apprenticeship, leaving aside learning in school.

IPE depends for its acceptance on finding accommodation between preordained structures and modes of learning for the participant professions. Situated learning may be welcomed by some professions, for whom it may be regarded as no more than an endorsement of current practice, but rejected by others. The more hierarchical and traditional the education for a given profession, the less likely it may be to embrace situated learning with the implied loss of intellectual authority and control. Situated learning may be tolerated by commissioning and regulatory bodies insofar as their requirements specify outcomes, but become problematic when those requirements specify inputs, i.e. content and learning methods.

It would be hard to conceive of situations in IPE devoid of competing claims for the inclusion of values, evidence and theoretical perspectives from different professions and other stakeholders. For the notion of a community of practice to be helpful and acceptable, it must be correspondingly inclusive. Much therefore depends upon how widely the boundary is drawn. A community of practice exclusive to practice learning may win friends amongst those in professional and interprofessional education who put a premium on such learning to the detriment of classroom learning, but be divisive. A community of practice which also includes classroom learning accords better with the notion of an IPE programme although time may be needed to develop Lave & Wenger's concepts accordingly and to win support for an elaborated model.

There is a case for going further, not only developing each programme as its own community of practice, but also IPE in its entirety as an overarching community of practice, i.e. embracing all its programmes plus national and regional systems and frameworks for its promotion, development, delivery and review. As one of those who perceive IPE as a 'movement', I find that proposition appealing. Figures 5 a, b & c can be applied to the second and third of these formulations. They convey how an IPE community of practice may be defined, reach out to professional programmes, draw them in and create conditions conducive to shared studies.

Figure 5a: IPE Community of Practice:
At the stage of initial engagement with an unspecified number of educational programmes for health and social care.

Incorporating the following theoretical perspectives:
activity; contact; discourse; organisation; reflective practice; regionalisation of knowledge; social constructivism; and systems

Figure 5b: IPE Community of Practice:
At the next stage when it has encompassed an unspecified number of professional programmes

Incorporating the following theoretical perspectives:
activity; contact, discourse; organisation; reflective practice; regionalisation of knowledge; social constructivism; and systems

Figure 5c: IPE Community of Practice:
At the following stage where some but not necessarily all their professional programmes come together in one of more clusters.

Incorporating the following theoretical perspectives:
activity; contact; discourse; organisation; reflective practice; regionalisation of knowledge, social constructivism; and systems

The end product should not be mistaken for the creation of an integrated, generic professional education programme. Rather a community of practice as a shared context and orientation for learning together, facilitating compatible and consistent approaches to programme design and curriculum development within which opportunities for learning together can be cultivated.

The way forward may then lie, not in chasing the rainbow in search of a discrete theory for IPE acceptable to all parties, but in integrating education for all health and social care within a unifying context (community of practice) and orientation (situated learning) within which other theoretical perspectives can be tested and, where necessary, modified to ensure their compatibility.

vii) Conclusion

The papers submitted can only be understood in the context of the burgeoning literature about IPE in recent years of which they form part. Eighteen years ago, however, that literature was anecdotal, descriptive and fragmented. Despite many on/off IPE initiatives during the preceding 20 years, relatively few had been written up. The field, friends urged me, was in need of accessible, objective, detached and critical commentary.

Predictably perhaps, a 'new boy' with a penchant for writing for publication in an allied field, found himself cast (willingly) in the role of scribe. My earliest writing about IPE responded to pleas for reliable case studies (Barr, 1994a), soon discriminating in favour of those that had been subjected to evaluation, however basic (Barr & Shaw, 1995). But more than examples was needed to instil meaning into a notion subject to enigma variations, and to embed it in policy, practice and education for health and social care with signposts for debate and development. Skills from prior experience again proved to be transferable, including some well tried research methods. Beyond lay the need for more rigorous and disciplined enquiry, calling on a repertoire of research methodologies in partnership with colleagues from diverse disciplinary backgrounds with whom it has been my privilege to work on joint assignments (outside the bounds of this thesis) in the best tradition of interprofessional learning and working.

If caution characterises my writing on matters interprofessional, that is deliberate and hopefully reflected in the papers submitted. They seek to balance the general with the particular, the exploratory with the evidential, and the high ground of policy, theory and research with the low ground of teaching, learning and practice. Eschewing the evangelical, they aim to elucidate and substantiate. If, in the process, they have laid some of the foundations on which others can build, I am content.

Paper A8 has almost certainly had most impact as the first in a series published electronically and in hard copy by the Higher Education Academy: Health Sciences and Practice Subject Centre in response to numerous requests form teachers for help with IPE. Paper C1, more especially the systematic review with which it is linked (Barr et al., 2005), seemingly brought to an end resistance to IPE on the grounds that evidence was lacking for its efficacy. Those papers may account, in part, for growing appreciation of the need for, and the merits, of qualitative evaluation in professional and interprofessional education. At the same time, they have driven home the need to discriminate between types of IPE with different objectives and outcomes relative to participants' experience and learning opportunities (as I had argued repeatedly but lacking supporting evidence in papers A3, A4, A8, B2 & B3).

Strengthening the evidence base remains a high priority, but enough progress has seemingly been made to enable many exponents of IPE to move on as they explore different approaches to teaching and learning (paper B4), introduce theoretical perspectives (paper D1) and probe value laden questions (paper D2), less distracted by critics on the touchline. Papers D1 and D2 were written with some trepidation in the hope that they would encourage others to contribute their beginning understanding. Publication soon after of another paper on theoretical perspectives (Colyer et al., 2005) was fortuitous and reinforcing, followed by others prompted in part by the lead given. Value bases have yet to be picked up in similar vein although the need to do so is pressing if IPE as a community of practice is to espouse values that inform its choice of theoretical perspectives and their application.

IPE, as we know it in England today, is a response to pressures originating in education, practice and the professions, channelled and directed by government towards implementing its policies for the modernisation of the workforce for health, social care and the wider public services. It reconciles, as best it can, an accretion of expectations by setting realistic objectives for each initiative located along a career-long continuum of professional and interprofessional learning, as yet inadequately formulated, still less implemented. The emphasis in recent years has been heavily on pre-registration IPE, in contrast to that on continuing professional development and post-registration studies in earlier years, but there is growing recognition of the need to redress the balance along that continuum.

Competing expectations may account for the confusion surrounding IPE as a concept during its formative years. Progress has been made in instilling coherence, but stakeholders still employ different discourses. There is little evidence of dialogue between them nationally, but ample evidence locally and regionally where the fruits of their partnership are plain in ambitious and well-documented pre-registration programmes. Credit is theirs for devising ways to weave IPE into the fabric of professional education, theirs too for developing programmes capable at best of delivering positive reciprocal perceptions and shared knowledge bases as intermediate outcomes that pave the way for collaborative practice. The challenge is to raise the standard of all these programmes to that of the best by stipulating the qualities necessary, underpinned by evidence, willing the means and improving evaluation and review.

Conclusion not closure: to attempt that would be premature at best and counterproductive at worst: premature when the education and practice within which IPE is embedded are subject to accelerating change; counterproductive when its effectiveness depends upon its flexibility and its sensitivity in response. IPE occupies the interface between professions, but also between policy, practice and education. Vulnerable and volatile in unsteady state: that is its birthright.

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Part 2: Assessment of multi-author contributions

Of the 18 publications presented, I was sole author for ten (papers A1, 2, 3, 5, 6 & 8, B2, 3 & 5, and C2.) and wholly responsible for the design, execution and presentation of two others. One of these (paper A9) takes into account observations by my co-editor for the Journal of Interprofessional Care whose name appears as co-author. For the other (paper A4), I was helped by a research assistant for the sole purpose of data collection under my supervision. Five of the publications (papers A7, B1 & 4, and D1 & 2) are chapters taken from a book based on a systematic review of evaluations of interprofessional education for which I was lead author (Barr et al., 2005). Two of these comprise formulations and classifications which I had previously published as sole author, brought forward and put in the context of findings from the review. A third (paper B1) is an original classification devised by me during that review. All three were critiqued by my fellow researchers who suggested examples and data to include from the review. Two other chapters (papers B.2 & B4) were collated, classified and presented, taking into account perspective volunteered by colleagues in addition to my own. The remaining publication (paper C1) reports an earlier review for which I carried lead responsibility throughout, working with the same team and authoring the report, save for the presentation of examples which was shared.

Reference:

Barr, H., Koppel, I., Reeves, S., Hammick, M. and Freeth, D. (2005) *Effective Interprofessional Education: Argument, Assumption and Evidence.* Oxford: Blackwell

Part 3:

Classified list of the submitted publications

A. From Instigation to Implementation

A1. Learning together. In: Meads and Ashcroft (2005) *The case for collaboration in health and social care.* Oxford: Blackwell 123-134

A2. *Interprofessional education in the United Kingdom: 1966-1997.* (2007) London: The Higher Education Academy: Health Sciences and Practice

A3. Unpacking interprofessional education. In: A. Leathard (ed) (2003) *Interprofessional collaboration: from policy to practice in health and social care.* London: Routledge 265-279

A4. *Interprofessional education in health and social care in the United Kingdom:* report of a CAIPE Survey (1996). London: CAIPE

A5. New NHS, new collaboration, new agenda for interprofessional education (2000). *Journal of Interprofessional Care* 14 (1) 81-86

A6. The Policy Framework. In: H. Barr (ed) (2007) *Piloting interprofessional education: Four English case studies.* London: Higher Education Academy Health Sciences and Practice

A7. Learning to work under pressure. In: H. Barr et al., (2005) *Effective interprofessional education: argument, assumption and evidence.* Oxford: Blackwell 10-28

A8. *Interprofessional education: Today, yesterday and tomorrow.* (2002) London: Higher Education Academy: Health Sciences and Practice, Occasional paper no. 1.

A9. Mainstreaming interprofessional education in the United Kingdom: a Position Paper (2006) *Journal of interprofessional care* 20 (2) 96-105

B. From Clarification to Codification

B1. Distinguishing between six domains. In: H. Barr et al., (2005) *Effective interprofessional education: argument, assumption and evidence.* Oxford: Blackwell 58-73

B2. Competent to collaborate: Towards a competency based model for Interprofessional education. (1998) *Journal of Interprofessional Care* 12 (2) 181-188

B3. Ends and means in interprofessional education: Towards a typology (1996) *Education for Health 9 (3) 341-352*

B4. Approaching learning and teaching. In: H. Barr et al., (2005) *Effective interprofessional education: argument, assumption and evidence.* Oxford: Blackwell 95-104

B5. Interprofessional education: The fourth focus. (2007) *Journal of Interprofessional Care; Supplement 1.*

C. From Evaluation to Verification

C1. *Evaluations of interprofessional education: a United Kingdom review for health and social care.* Barr et al, (2000) London: CAIPE and the British Educational Research Association (See: www.caipe.org.uk)

C2. Evaluating interprofessional education (2005). In: C. Carlisle (ed) *Interprofessional education: An agenda for health car professionals.* Salisbury: Quay Publications 167-180

D. From Conceptualisation to Theorisation

D1. Thinking theory. In: H. Barr et al., (2005) *Effective interprofessional education: argument, assumption and evidence.* Oxford: Blackwell 120-138

D2. Reconciling values. In H. Barr et al., (2005) *Effective interprofessional education: argument, assumption and evidence.* Oxford: Blackwell 105-111

Part 4:

The Submitted Publications

Paper A1

Learning together

Chapter 8

In:
Meads, G. & Ashcroft, J.
with Barr, H., Scott, R. & Wild, D.

2005

The case for collaboration in health and social care

Oxford
Blackwell

123 - 134

LEARNING TOGETHER

Purpose

Learning about collaboration is one thing: learning how to collaborate is quite another. It is active - interactive between the parties who need to collaborate. It happens during education and practice, interprofessional education where professions learn with, from and about each other to forge effective working relations, interprofessional practice where those relationships are tested and developed. Interprofessional working is the axis around which collaboration within and between organisations and with patients, carers and communities revolves.

This chapter reviews the development of interprofessional education worldwide from a corporate perspective during the past thirty years[1]. It leads into two further books in preparation for this series, one establishing the evidence base for interprofessional education (Barr et al, forthcoming)[2] and the other offering practical advice about developing, delivering and evaluating interprofessional education programmes (Freeth et al, forthcoming).

The World Health Organization

The origin of interprofessional education is widely attributed to a seminal report from an Expert Group convened by the Geneva headquarters of the World Health Organization (WHO, 1987). That report - "Learning Together to Work Together for Health" – did much to inspire interprofessional education initiatives around the world and remains the most authoritative statement. Its significance, however, lay in reaffirming and reinforcing much that the WHO had said before while collating and presenting prior experience to further WHO objectives. Its support for interprofessional education sprang from its mounting concern about the relevance of health professions' education, especially medical education, over many years, as Tope (1987) has assiduously documented. In 1973, an Expert Committee reviewing medical education had seen interprofessional and traditional programmes as complementary. Its members believed that interprofessional education would improve job satisfaction, increase public appreciation of the health care team and encourage a holistic response to patients` needs. Each member state in the WHO was charged with the task of providing interprofessional programmes, beginning with demonstration projects (WHO, 1973). By the time delegates met in Alma Ata (WHO, 1978), interprofessional education was already firmly included in the emerging WHO strategy to promote `Health for All by the year 2000`.

The 1987 Group was convinced that community oriented, interprofessional

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[1] It is based on a longer review of the development of interprofessional education worldwide, by Hugh Barr, which is periodically updated, to be found on www.caipe.org.uk .

[2] As this particular chapter can also be read as a free standing research paper the standard Harvard referencing system is employed throughout, within the actual text.

education of health personnel had an important place in strategies for achieving Health for All which the WHO had set out a decade before (WHO, 1978). Its conviction was confirmed by examples quoted of interprofessional education in no fewer than fourteen countries - Algeria, Australia, Canada, Egypt, France, Israel, Mexico, Nepal, Pakistan, the Philippines, the Sudan, Sweden, the UK and the USA.

Nor was the WHO the only international body involved. The Organisation for Economic Co-operation and Development had convened a conference in 1977 to foster exchange of experience between interprofessional education programmes in different countries. It gave examples of core curricula designed to develop the `Regional University` to unite schools for the health professions in a common mission in response to the needs of the societies they served (OECD, 1977).

The first acknowledgement of interprofessional education by the World Federation of Medical Education came in 1988 (WFME, 1988). In the following year it called upon all nations globally to train their doctors in close association with the training provided for the other health professions, a message that it reinforced in 1993 (WFME, 1994). The ethos of teamwork was established, said Lord Walton (then President of the WFME), through interprofessional education. The outcome would be more cost-effective doctors, better equipped to work as members of health teams for the benefit of both patients and communities (Walton, 1995).

The degree to which the WHO and other world organisations influenced national developments differed from country to country. Reference to the WHO is conspicuous by its absence from USA and found only occasionally in UK sources, but more often in those from smaller European states and developing countries.

Europe

Building upon the seminal report from its headquarters in Geneva, the WHO Regional Office for Europe convened a workshop in Copenhagen which further advanced the case for interprofessional education. Participants believed that such education would help health professions' students with complementary roles in teams as they came to appreciate the value of working together by defining and solving problems within a common frame of reference. Participatory learning methods would facilitate modification of reciprocal attitudes, foster team spirit, identify and value respective roles, whilst effecting change in both practice and the professions. All this would support the development of integrated health care, based upon common attitudes, knowledge and skills. Programmes were to be mounted collaboratively at every educational level and evaluated systematically (d'Ivernois and Vodoratski, 1988).

Two reviews have been conducted of interprofessional education in Europe. The first informed discussions during the WHO workshop (d`Ivernois, Cornillot and Zomer, 1988). The second commissioned by the Council of Europe (European Health Committee, 1993) tracked subsequent developments. Both focused upon programmes in particular universities rather than the workplace, with little reference to the context in which they had been instigated.

The review for the WHO included reports on developments in Belgium (Piette, 1988), Finland (Isokoski, 1988), France (d`Ivernois, Cornillot and Zomer, 1988), Greece (Lanara, 1988), Portugal (Rendas, 1988), Sweden (Areskog, 1988), the UK (Clarke, 1988; Thomson, 1988), the USSR (Shigan, 1988) and Yugoslavia (Kovacic, 1988). Those in France and Sweden attracted most interest subsequently in other countries.

The second review for the Council of Europe took the form of a questionnaire to all its member states, with follow up visits to some. Information was received from Cyprus, Germany, Holland, Liechtenstein, Luxembourg, Norway, Spain, Switzerland and Turkey. In addition, working party members were able to report developments in their home states, namely Austria, Belgium, Czechoslovakia, Denmark, Finland, France, Hungary, Portugal, Sweden and the UK. Findings were, however, disappointing. Interprofessional education had reportedly been implemented in only a few European centres. Postgraduate developments were, said the report, spread thinly. In most countries they took the form of `on the job` short courses, joint learning leading to diplomas or degrees being the exception. Most developments were in response to local initiatives. None of the member states reportedly having national policies to encourage interprofessional education. Except in The Netherlands, central government departments of health and education were, according to the report, unaware of what was taking place in their own countries. The Council of Europe endorsed the report and outlined a four-stage strategy to promote interprofessional education in its Member States. These were the dissemination of information through seminars, access to consultants to help in planning programmes, implementation of those programmes and systematic evaluation before and before the intervention (European Health Committee, 1993; see also Barr 1994b and Jones, 1994).

A European Network for the Development of Multiprofessional Education in Health Sciences (EMPE) was established in 1987 (Goble, 1994a&b), and continued until 2000 when it merged with the Network for Community-based Medical Education (as it was then known) (see below). Its newsletter and annual conference during the intervening years provided opportunities to exchange experience between educational institutions mounting "multiprofessional" courses throughout Europe.

Interprofessional education developed in the UK on a larger scale than in most other European States. Why this has been so is not obvious except in more recent years. The first UK initiatives were reported in the 1960s and 1970s. Many promoted team development in primary and community care. Most were brief, work-based and short-lived. Few were recorded. Reports of national conferences convened jointly by professional associations and regulatory bodies did, however, capture the essence of these pioneering developments (England, 1979; Loxley, 1997; Thwaites, 1993). Credit for translating local initiatives into a nation-wide movement went to the Health Education Authority which engaged representatives of primary care teams in a rolling programme of workshops designed to implement health promotion strategies (Spratley 1990a&b). Meanwhile, a succession of high profile reports from inquiries into cases of abuse prompted joint training in child protection.

Interprofessional education was also taking root in universities. Exeter was first in the field in 1973 when it launched continuing education programmes shared between health and social care professions followed in 1986 by the first joint masters course (Pereira Gray et al. 1993). Other masters courses followed (Leathard, 1992; Storrie, 1992).

Despite conventional wisdom to the effect that interprofessional education should wait until students had qualified, undergraduate initiatives were also attracted passing mention during the 1970s (Mortimer, 1979). The first to be more fully reported was at Salford which drew on experience from Adelaide (Australia) and Linkoping (Sweden) to develop problem based learning (PBL) as a means to cultivate collaboration between professions (Davidson and Lucas, 1995).

The Conservative Governments of Margaret Thatcher and John Major between 1979 and 1997 put their faith in the virtues of competitive markets, which seemed at first to undermine much hard work to introduce collaboration. They continued, however, to espouse collaboration to implement health and social care reforms backed by calls for `shared learning` and `joint training` (Barr, 1994a; Leathard, 1994; Loxley, 1997; Mackay et al. 1995) without apparent sense of contradiction.

Commitment to collaboration was renewed and reinforced following the election of the Labour Government in 1997. While competitive undercurrents remained, the emphasis was now upon integration, partnership and joined up thinking from grass roots practice through to the corridors of Whitehall. Collaboration, as Chapter 2 argued, has been as much between organisations, and with patients, carers and communities, as between practising professionals.

No longer on the margins, interprofessional education was to be built into the mainstream of professional education across heath and social care to promote such collaboration. No longer mostly after qualification, elements of "common learning" were required in all undergraduate programmes for all the health and social care professions. Interprofessional education itself would be developed and managed in partnership between employers and universities.

Interprofessional education has become less a vehicle through which to improve understanding based upon mutual respect between seemingly stable professions and more an instrument to effect change which destabilised roles, made boundaries permeable and generated newfound stress between professions with all of which it had to engage. Earlier models of interprofessional education were rendered less than adequate. Engendering trust and understanding between professions, however, remained the precondition to ensure concerted commitment to change in furtherance of the Government's modernisation agenda (Secretary of State for Health, 1997).

CAIPE was founded in 1987 following the first flush of interprofessional developments. Caught by then in a more competitive and less sympathetic environment, it held fast to the convictions of its founders about the efficacy of interprofessional education in improving teamwork and, in turn, the quality of care. Its self-appointed remit was to promote interprofessional education as a means to improve collaboration between practitioners in health and social care, working with and through its members to provide a network for information exchange and discussion by means of conferences and seminars, a bulletin and occasional papers and periodic surveys and reviews. That brief changed as collaboration gained ascendancy over competition, following the change of government in 1997 when interprofessional education began to enjoy official backing. No longer championing an unpopular cause, CAIPE was working with the grain. Its task now was to inform the new wave of developments, drawing upon but going beyond lessons learned from past experience as the situation demanded, challenging ill-conceived innovations while recognizing increasingly the need to secure the evidence base for interprofessional education. (See www.caipe.org.uk.)

Other central bodies also supported developments in interprofessional education as it moved into the mainstream of higher and professional education. The three Learning and Teaching Support Networks for the health and social care professions joined forces to support developments in universities and to provide a clearing house through its website (www.triple-ltsn.kcl.ac.uk). The Association for the Study of Medical Education drew other professions into its debates through interprofessional conferences (www.asme.org.uk) The Learning for Partnership Network, under the wing of CAIPE, facilitated exchange on matters interprofessional between regulatory and professional bodies centrally.

A survey commissioned by CAIPE toward the end of the 1980s found 695 examples of interprofessional education in Great Britain. Most were short and formed part of continuing professional development (Shakespeare et al. 1989 as summarised by Horder, 1995). A follow up survey for the whole of the UK found 455 initiatives, but based upon a much lower response rate which belied the increasing prevalence of interprofessional education in the intervening years (Barr and Waterton, 1996). The number of interprofessional education programmes since then has increased markedly, so much so that further surveys have been precluded on grounds of cost. Tracking fast changing developments has become ever more problematic rendering findings soon out of date. Furthermore, interprofessional education increasingly comprises strands woven into the fabric of professional education making it harder to identify and quantify.

The other main concentration of interprofessional education in Europe is in the Nordic Countries, notably Sweden, Norway and Finland.

Of developments in Sweden, undergraduate interprofessional education at the regional health university at Linkoping attracted most interest and came to be regarded as a classic study worldwide. Capitalising upon the amalgamation of schools for medicine, nursing, occupational and physical therapy, laboratory assistants and social assistants, Linkoping introduced a common ten-week programme for all its undergraduate students at the start of their first year to cultivate collaboration. Common curricula employed problem-based learning methods (Areskog, 1988a, 1988b, 1992, 1994 and 1995; Davidson and Lucas, 1995). Other developments in Sweden have been reported at: the University of Goteborg, which had postgraduate programmes in public health; Vanersborg University College which had an undergraduate programme in European Health Sciences (Freden, 1997); and in Stockholm in association with the Karolinska Institute through a number of interprofessional training wards.

The Norwegian government decided that undergraduate interprofessional education should be piloted in Tromso between students of medicine in the University and of other professions in the College of Health (Ekeli, 1994). While there were similarities between developments in Linkoping and Tromso, the latter included a wider range of health professions, ran shared studies concurrently with uniprofessional studies and focused less exclusively upon problem based learning (Freden, 1997).

The first reported interprofessional education programmes in Finland were in health administration at the universities of Tampere (Ikoski, 1988) and Kuopio (d`Ivernois, Cornillot and Zomer, 1988). These pioneers were followed by a number of programmes further north in Oulu Polytechnic, which applied a model of holistic care (Lamsa et al, 1994; Lamsa, 1999), while staff from the University of Oulu Medical School introduced an innovative programme in family systems education employing a bio-psycho-social model (Larivaara and Taanila, forthcoming).

The Nordic Network for Interprofessional Education (NIPNET) was established in 2000. It facilitates mutual support and stimulus by e-mail correspondence and an annual conference for interprofessional activists starting with Finland, Norway and Sweden but seeking to extend to include Denmark, Iceland, the Baltic States and adjoining parts of Russia. (See www.nipnet.org.)

Interprofessional education programmes throughout the remainder of Europe have been widely scattered. Noteworthy amongst them was the Medical Faculty of the University Paris-Nord at Bobigny in France which introduced a common core of studies in nursing, biology, health administration and clinical psychology for first year undergraduates from 1984 onwards, followed by interprofessional masters courses (d`Ivernois, Cornillot and Zomer, 1988).

North America

Direct reference to the role of the WHO in promoting interprofessional education is conspicuously lacking in the American literature where foundations were being laid as early as the 1930s with the shift from learning by rote to problem solving (Dewey, 1939). Later, during the 1960s and 1970s, the new systems approach gained, according to Kuehn (1998), widespread popularity as a framework that could support the more interactive and changing environment of health care education and delivery. At the same time, broader-based movements in higher education toward interdisciplinary interaction were prompting the re-examination of health professional education from an interdisciplinary perspective. This, Kuehn reminds us, was also the time when Piaget (1970) was calling for a more collaborative approach in both teaching and research. It was the time too when the 1971 Rockefeller Foundation Task Force on Higher Education called for changes in professional education to obviate "the stifling effects of rigid curricula that inhibited any movement towards interactive or creative endeavours" (Newman, 1971). A year later, the Carnegie Commission had proposed a lessening of emphasis upon professional boundaries, a holistic approach and the building of curricular bridges to combat the inherent parochialism of professional education. But perhaps the most powerful moves towards collaborative education, thought Kuehn, had come in the 1990s with the rush to control the economics of both health care and health professions education with the advent of health maintenance organisations and managed care (see Chapter 2).

The first published reports about interprofessional education in North America appeared during the nineteen sixties (Lewis and Resnick, 1966; Kenneth, 1969; Szaz, 1969). Some were associated with the introduction of teamwork in primary care (Beckard, 1974; Fry et al. 1974). As far back as 1958, Silver in his description of teamwork in general practice had noted the opportunity for informal learning between team members occasioned by the ease of communication (Silver, 1958).

Pioneering interprofessional programmes reported by Baldwin (1996) in North American universities included British Columbia, Nevada, Hawaii and Sherbrooke. During the 1970s six medical schools – Nevada, Michigan State, North Carolina, Washington, Utah and California at San Francisco - devised a common model for team training. Developments differed in emphasis. Some like British Columbia and Minnesota had a more academic focus, others like Miami, Colorado and Indiana a more clinical focus, yet others like Kentucky a community focus, while Nevada and Georgia sought to strike a balance. These university-based initiatives were complemented by work-based initiatives, support for "interdisciplinary training" being noteworthy from the Veterans Administration in the context of interdisciplinary care teams, which generated a cadre of team trainers nationally for the care of the elderly and more broadly.

Many of the early developments enjoyed federal support, much of which had been withdrawn by 1980, although some continued from the Bureau of Health Professions of the Health Resources and Services Administration. Philanthropic foundations played an increasingly major part. The Pew Charitable Trust Foundation published a report strongly advocating interdisciplinary training for future health professionals (O'Neil, 1993). The Hartford Foundation provided grants, for example, for the Geriatric Interdisciplinary Team Training Program (GITT) (Siegler et al, 1998), while the W.K. Kellogg Foundation funded university-community partnerships and the Robert Wood Johnson Foundation funded the Partnership for Quality Education Initiative to support the development of nurse practitioner/physician teams in primary care.

The Community/Campus Partnerships for Health movement gathered momentum later, linking programmes in the USA and other countries to cultivate collaboration between universities and neighbourhoods to provide health services and thereby to develop practice-based community-oriented curricula (Seifer and Maurana, 1998; Foley and Feletti, 1993). These developments were closely linked with the service learning movement associated with the Health Professions Schools in Service to the Nation Program (HPSISNP), which examined the impact of such learning on students, faculty and communities (Gelmon et al, 1998). Similar partnerships have been established also that reach beyond health care. These adopt a community development model and involve as wide as possible a range of academic disciplines and practice professions in response to needs identified in consultation with local communities.

Interprofessional education in North America comprises interlocking networks for communication and shared learning with many new initiatives underway, supported by both government and foundation moneys. One of the longest established is the Annual Interdisciplinary Health Care Team Conference that brings together teachers and trainers who employ interprofessional education to promote teamwork in hospital and community settings. At the time of writing, this Conference was taking the lead in engaging like-minded North American organisations in discussions designed to cultivate closer collaboration at national and international level.

Australasia

In Australia plans were made during the 1970s for interprofessional education in ten medical schools, although only one got off the ground. This was at the University of Adelaide in collaboration with the South Australia Institute of Technology where federal funding made it possible to mount joint programmes for 600 undergraduates on community health and practice. Federal funding was withdrawn towards the end of the 1980s, but the programme not only continued but was also extended to include other institutions bringing in students from a wider range of professions. Shared undergraduate studies ceased in 1992 for lack of resources although shared postgraduate studies continued as did practice workshops (Davidson and Lucas, 1995; Graham and Wealthall, 1999; Piggot, 1980; Tope 1996; Vanclay, 1995). Plans for similar developments were reportedly getting underway at the University of Newcastle during the early nineties where the focus became the development of flexible, need oriented, 'knowledge-able' health and social care professionals (McMillan 2003). In addition, a WHO Regional Training Centre in the College of Medicine at the University of New South Wales had been running advanced and postgraduate courses for some years for a range of health personnel from Asian and pacific countries (Vanclay, 1995).

Graham and Wealthall (1999) reported that a number of other Australian universities, including Curtin, La Trobe, South Australia, Sydney and Queensland, had adopted some form of common curriculum. They nevertheless observed that "the exigencies of university life" in Australia inhibited the flexibility required to foster such developments although stakes were less high for continuing professional development. Moves were, however, afoot to increase interprofessional learning experiences for all professional groups.

Significantly, the Australian and New Zealand Association for Medical Education (ANZAME), widened its membership to include all health professions, established a special interest section on "multiprofessional education" and launched a "multidisciplinary" journal. (See www.anzame.unsw.edu.au.)

Developing Countries

Interprofessional education has been reported in the following developing countries: Algeria, the Cameroons, the Dominican Republic (Kuehn, 1989; Vinal, 1987), Fiji, the Philippines, Thailand (WHO, 1987; Tope, 1996), the Sudan (Hamad, 1982; Tope, 1996), Beirut (Makaram, 1995), Columbia (Penuela, 1999) and South Africa (Lazarus et al. 1998; Lehmann, 1999). While some of these initiatives are similar in form and composition to those reported in developed countries, others extend the range of professions to include, for example, agriculturist, engineers and sanitarians engaged in public health and community development projects. Some are also designed to create a flexible workforce that the country can afford, unfettered by narrow definitions of professionalism and preconceived demarcations inherited from colonial powers.

Bajaj (1994), for example, described a competency-based approach to interprofessional education in India and its inclusion at all stages in the educational continuum from pre-qualifying programmes through orientation to beginning practice to continuing education. This was built around a core curriculum combined with problem-based learning to acquire and demonstrate competence in teamwork. Interprofessional education, said Bajaj, had to address the particular health problems of the community and therefore be community-based. Predetermined institutional frameworks had to be replaced or enlarged. Village schoolteachers, for example, had been helped to develop their role in primary health care by participating in shared learning with other health personnel.

Having invested heavily in interprofessional education in the USA, the W.K. Kellogg Foundation backed initiatives in developing countries through its TUFH Program. This comprised 20 projects in eleven countries in Latin America and the Caribbean to integrate the university, the services and the community and foster interprofessional collaboration (Richards, 1993; UNI, 1999; Goble, 2003) and in South Africa (Lazarus et al. 1998).

Community-oriented Education for Health Sciences

Two international movements grew out of the lead given by the WHO, with which others have become associated over the years.

The more cohesive is "The Network" based in Maastricht in The Netherlands established in 1979 to promote community-based medical education by means of problem-based learning. It enjoys official relations with the UN and the WHO, and has some 300 member-institutions worldwide as Chapter Six reports. The Network has become increasingly interested in, and committed to, interprofessional education following mergers with the European Network for the Development of Multiprofessional Education (EMPE) and, more recently, WHO Unity for Health, and joint activities with Community-Campus Partnership. (See www.the-networktufh.org.)

The other movement loosely links groups like the US Interdisciplinary Health Teams Conference, CAIPE, NIPNET plus likeminded individuals and programmes worldwide. The Journal of Interprofessional Care is its vehicle to exchange experience and extend mutual support. Unlike "The Network", this movement has the promotion of interprofessional education and practice as its primary goal; involves the health and social care as equal partners; and explores wider-ranging models and learning methods in interprofessional education.

These two movements nevertheless have much in common, both echoing the WHO clarion call, and both acting on the belief that education - including interprofessional education - has the power to effect change in response to the expressed needs of patients and communities as partners.

Learning between developed and developing countries

Systematic comparison between interprofessional education programmes internationally is overdue. Similarities are striking between developing countries in Australasia, Europe and North America despite limited opportunities until recently to exchange ideas and experience. Differences between the so-called developed and developing world are more marked. While developing countries have concentrated on preparation for practice with individuals and families, developing countries have grasped the significance of interprofessional education and practice to mobilise resources for community development and public works. Sources assembled in this chapter challenge any assumptions that Europe was the cradle of interprofessional education from which it has reached out to developing countries (Goble, 2003). The thread of corporate commitment runs rather between the USA and Latin America and beyond, leaving Europe in relative isolation save for a handful of dedicated interprofessional exponents committed to work with and through internationally institutions. Above all, sources reviewed in this chapter, and Chapter Three, point to the need for more dialogue, exchange and mutual support between developed and developing countries so that each can learn from the distinctive experience of the other in the best tradition of interprofessional education.

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Paper A2

Interprofessional Education in the United Kingdom 1966 to 1997

2007

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Higher Education Academy
Health Sciences & Practice Subject Centre

Interprofessional Education in the United Kingdom 1966 to 1997

Hugh Barr

This paper is dedicated to Dr John Horder CBE in appreciation of his seminal role in promoting interprofessional education in health and social care in the United Kingdom.

Few words must serve his turn.
For he's sagacious who must live taciturn.
And airs no noisy cunning of his trade
But keeps his private purpose deeply laid;
Gives neighbours nothing of his confidence,
And takes his counsel of his own good sense.
No wise man utters what he inly knows;
Certainty in a loose uncertain world
Is far too firm a treasure, wiseman goes
Jealous and wary, keeping darkly furled
His small, particular, knowledge ---

Vita Sackville West in praise of the yeoman farmer in 'Winter' from The Land, London, Heinemann, 1926, 22, cited by Carrier and Kendall, 1995: 34

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Foreword

Sir Kenneth Calman, FRSE, PhD, BSc, FRCP, FRCS (Ed), FRCGP

It is a pleasure to write a few words for this report on interprofessional education (IPE) in the UK. It is a tortuous but fascinating story told by someone who was part of the narrative and who has contributed much to it. It is a story which needed to be written to document the difficulties and successes of working and learning between professional groups. As Hugh Barr notes in the early part of the report, the restrictiveness of the medieval guilds still remains powerful. The borderlands and boundaries which were encountered in the research for this report show how much we still have to learn about each other. It is interesting to note that in other areas of learning and research it has been the boundaries which have been the exciting areas to be in and from which new thinking emerges.

For me the key to all of the issues surrounding IPE is what does it do for patients and the public? How does it improve patient care? If the professions are not convinced of the value to patients then it will be difficult to implement. This report begins to document what the value might be.

One motivation for improved IPE is the current complexity of patient care and the need to know what others can contribute and how the wide range of skills and expertise can be integrated. Over the years numerous reports have documented poor professional practice in all groups and the recurrent failure to use the expertise readily available in another group if only it had been sought. This does nothing to help patients and build public trust. Learning together can assist this process of improving care.

This report finishes in 1997, at a time of increasing activity in IPE. It lays the foundation and begins to point the way ahead. When should IPE occur in the professional educational journey? Should initiatives be short term or integrated in a longer term way? Do such initiatives really change attitudes? Questions such as these continue to be tackled and the increase in initiatives and publications over the last few years is encouraging.

One final point: in a book that I wrote recently[1] I used the term "beyond learning" as a way of drawing attention to the fact that learning involves understanding what someone else already knows. We know that much more needs to be understood about health, illness and the social and environmental issues around health care. We could see IPE as one way of looking beyond what we already know to find better ways of caring for the benefit of patients and the public.

Kenneth C. Calman
University of Glasgow

1. Medical Education: past present and future. 2006, Churchill Livingstone, Elsevier, Edinburgh

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Definitions:

Multiprofessional Education:
Occasions when two or more professions learn side by side for whatever reason.

Interprofessional Education:
Occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of care.

(CAIPE 1997 revised)

Semantics:

Terms used are those current at the time, e.g. patient or client (depending on context) rather than service user, and mental handicap rather than learning disabilities.

Abbreviations:

CAIPE: the UK Centre for the Advancement of Interprofessional Education
CCETSW: the Central Council for Education and Training in Social Work
CPSM: the Council for Professions Supplementary to Medicine
DHSS: the Department of Health and Social Security
ENB: the English National Board for Nursing, Health Visiting and Midwifery
GNC: the General Nursing Council
GP: General Practitioner
HEA: the Health Education Authority
IPE: Interprofessional Education
JPTI: the Joint Practice Teaching Initiative
UK: the United Kingdom
UKCC: the United Kingdom Council for Nursing, Health Visiting and Midwifery

Introduction

Whenever professions may have first shared their expertise, interprofessional education – planned and structured opportunities for interprofessional learning – did not begin until the 1960s. Concern to improve collaboration had built up over many years, notably since the Second World War as fault lines had appeared in the edifice of the Welfare State. 'Repairs' concentrated more on improving relationships between agencies than between their workers until it became apparent that human frailties could frustrate best laid plans to coordinate and integrate services. Whilst some professionals may have revelled in the prospect of change, others were thrown on to the defensive and liable to withhold collaboration when it was most needed.

One change, more than any other, was laden with implications for relations between the health and social care professions, namely the shift of emphasis from institutional to community-based services. Calls for a more flexible, more fluid and more responsive workforce, laudable in themselves, resulted in ambiguity in roles and responsibilities that rekindled rivalry. Despite the many claims made on its behalf, teamwork was no panacea as tensions, denied or dormant so long as professions remained at arms length, were confronted at close quarters.

It was against this backdrop that interprofessional education (IPE) began to win friends in the belief that it could ease tensions between professions and promote teamwork. These twin objectives were, however, soon to be overlaid by others that compromised the clarity of IPE as a concept. It fell to its exponents to hold the tension between responding to ever more challenges in ever more fields of practice and instilling consistency, coherence and credibility.

Why, given the self-evident need, was IPE so long in coming? Explanations are several. Time was needed for problems and over-reliance on organisational solutions to become apparent, for the case for IPE to be made, for the professions to put their houses in order, above all for IPE to find fertile ground in new educational structures and methods.

Dividing history into decades is simplistic although the interprofessional story lends itself to such treatment. The legislative planks for the Welfare State were established during the 1940s and policies implemented during the 1950s whilst the professions embarked on fundamental reforms: medicine to build up general practice; social work and nursing to cultivate their corporate identities; the allied health professions to establish their standing alongside the big battalions. IPE initiatives were first launched during the 1960s and multiplied during the 1970s in an increasingly favourable climate, leading to sustained developments in the 1980s often integrated into professional education. Foundations had been laid on which the incoming government elected in 1997 could incorporate IPE into its strategy for the modernisation of health and social care.

Preface

This paper offers an historical perspective on the development of interprofessional education (IPE) in health, social care and related fields in the United Kingdom (UK) up to 1997 compiled to:

- secure the historical record;
- provide a foundation on which to review subsequent developments;
- inform future policy, education and practice.

It is addressed to policy makers, programme planners, researchers, teachers, trainers and post-registration students searching for in depth understanding of the derivation of IPE. It provides a rich vein which teachers may mine for material to inform pre-registration IPE and fellow researchers to expedite their enquiries.

The paper picks up threads from three earlier papers, two prepared for the UK Centre for the Advancement of Interprofessional Education (CAIPE) (Barr, 1994a; Barr & Shaw, 1995) and one for the Higher Education Academy (Barr, 2002). I have, however, introduced a wealth of additional material, much of which has come to my attention more recently.

Sources include published accounts of IPE, complemented by others from the grey literature amassed over the years and augmented by oral and written communications from fellow interprofessional exponents. I have erred on the side of inclusion where sources were in danger of being lost. Examples were chosen from amongst the many that came to hand. I lay no claim to be comprehensive, leaving others to dig deeper in selected fields of IPE aided by systematic searches of the literature.

The literature surrounding IPE has grown exponentially in recent years. Sources quoted here are highly selective and limited to those before 1997. Readers new to the field may find it helpful to refer to Barr (2002), Barr et al. (2005) and Freeth et al. (2005), amongst many others, for wider coverage.

The end product has been discussed with colleagues in draft to correct errors, fill gaps and look together for explanations behind the events to which we had variously contributed. Comments from others who had a slice of the action will be valued (preferably by email to barrh@wmin.ac.uk). I look forward especially to hearing from those readers able to offer additional sources, including unpublished material and personal reminiscences. All contributions will be acknowledged and taken into account when the time comes to revise the paper.

Purists might have preferred to focus on interprofessional to the exclusion of uniprofessional and multiprofessional education, but to do so would have disregarded ways in which interprofessional elements are embedded within them. Together they comprise professional education as it is increasingly understood. Few examples of discrete IPE were found and typically confined to task-specific conferences, short courses and workshops in primary and community care (see chapter 2).

Initiatives chosen for inclusion are indicative of aims, content and methods employed during the formative years of IPE in the four countries of the UK, not necessarily representative of other initiatives in those countries. Figures are no more than snapshots from reviews and surveys. Methodological shortcomings are acknowledged.

It has become more difficult to separate developments in IPE in the UK from those in other countries in which they are now entwined as part of a global movement, but limits had to be set on the exercise in hand. Worldwide developments have been reported by the author elsewhere (Barr, 2000, see www.caipe.org.uk updated as chapter 8 in Meads & Ashcroft et al., 2005).

I mention in passing where initiatives reported have been evaluated, but refer readers in search of evaluations to those included in the IPE emerging evidence base from systematic and other reviews (Barr & Shaw, 1995; Barr et al., 2000; Barr et al., 2005[2]; Cooper et al., 2001; Hammick et al., 2007; Zwarenstein et al., 2000). Some of the same authors (Freeth et al., 2005a&b) suggest approaches to IPE evaluation.

This paper comprises eight chapters and two appendices.

Chapter 1 compares perceptions of professionalism through the eyes of sociologists. Like the professionalism within which it grows, interprofessionalism is seen to be a contested concept. Problematic though that may seem, IPE becomes the arena where conflicting principles and priorities can be exposed, addressed and sometimes resolved as practitioners from different professions establish common ground for collaborative action.

Chapter 2 analyses the impact of growth in the number and variety of service providing agencies, the proliferation of professions, the complexity of problems presented by service users compounded by rising expectations, high profile reports of service error and adverse effects on the morale of practitioners. It finds single solutions wanting to resolve multifaceted problems, warning especially against reliance on IPE as the panacea.

Chapter 3 identifies predisposing trends in the location, management and delivery of professional educational favouring the introduction of IPE and some of the many the precipitating factors.

Chapter 4 recaptures the energy, enthusiasm and singleness of purpose that characterised pioneering interprofessional workshops and conferences in fields such as primary care, community care, health education and child protection, the interplay between local and national events, and the progression from isolated one-off 'initiatives' to rolling programmes to promote better health and improve service delivery.

Chapter 5 explores where, when, why and how IPE became an element within the growing number of multiprofessional post-qualifying courses in response to students' needs and expectations in education, management, research and specialist practice. It

[2] For a summary of this paper see www.health.heacademy.ac.uk

describes how interprofessional emphases or dimensions were woven into the fabric of multiprofessional programmes. Particular attention is paid to those few courses that claimed from their inception to be primarily interprofessional, although it is clear on closer inspection that they also included multiprofessional studies.

Chapter 6 traces the development of collective movements in qualifying education for social work, nursing, allied health professions and the complementary therapies as these 'families' of professions grew closer. It takes into account two other movements, one at professional level cutting across nursing and social work in the field of mental handicap (as it was known at the time), the other at paraprofessional level across all vocational fields. It suggests that these six movements did much of the groundwork for the introduction of IPE at the qualifying stage.

Chapter 7 pulls together threads from surveys and reviews of IPE that reported towards the end of the period covered by this paper. All had limitations, but together they provide the best available overview of the state of the art.

Chapter 8 summarises lessons learned from the past and their implications as IPE moved into a more radical phase of development.

The first of two appendices provides signposts and milestones charting the development of IPE during the years under review. The second describes the contribution made by CAIPE, highlighting its more significant events, projects and publications.

The year 1997 provides a natural break point, after which the incoming government adopted a radically different agenda for IPE as part of its strategy for workforce development to help modernise health and social care services. I have already responded with pleasure to an invitation from the Higher Education Academy: Health Sciences and Practice Subject Centre to complement this paper by another now that key sources are available for the remaining ten years and recent events can be put in perspective. That paper will also include a critique of lessons to be learnt and their implications for the future, embedded in a conceptual framework.

Chapter One

Perceptions and Perspectives

Positive and negative perceptions of professionalism offered by sociologists reflect and reinforce those of the public, the press and politicians, played out within and between the professions themselves whenever and wherever they work and learn together.

Occupational protectionism is as old as the medieval craft guilds from which the first professions emerged, reinforced down the centuries as each laid claim to discrete knowledge, claims which exaggerated differences and made invidious comparisons. Notwithstanding the benefits that professionalisation has wrought, the professions came to be regarded as conservative, each guided more by concern to preserve the established order and protect the collective self-interest of its members than by the public good. Friedman (1982) suggested that the overthrow of the medieval guild system was an early move in the triumph of liberal ideas in the Western world, but the increasing tendency to licence practice a retrograde step restricting the market.

Professions, according to sociologists such as Johnson (1972), Larson (1977) and Freidson (1994), had the power to control markets. They were gentlemen's clubs (Marshall, 1963) or cartels (Freidson, 1986) excluding lay participation, echoing George Bernard Shaw's oft quoted aphorism that the professions were conspiracies against the laity.

Others were more charitable[3]. Tawney (1921), with astonishing foresight, perceived professionalism as a force for stability and freedom against the threat of the encroaching industrial and governmental bureaucracy, a perception reinforced later by Marshall (1950) for whom it was a bulwark against threats to stable democratic processes and for Parsons (1951) helping to maintain the fragile social order. In similar vein, Freidson (1994) defended professionalism as a desirable way to provide complex services to the public impoverished by market-based or bureaucratic intervention.

For Krause (1966), the professions had dual motives: to provide service and to use their knowledge for economic gain. For Abbott (1988), they competed for jurisdiction during a contagious, complex and comparative process of professionalisation. Viewed thus, they evolved, and continue to evolve, by accommodation with each other in unsteady state within an all embracing concept of professionalism.

On reflection:
Small wonder that interprofessionalism, like the professionalism within which it had grown, prompted contrasting perceptions, at one extreme a threat to those in the professions intent on preserving the status quo, at the other a rallying call for those in search of a collective means to effect change from within. IPE has been implanted in contested territory where values, ideologies

[3] For further discussion see Carrier and Kendall (1995) and Evetts (1999)

and philosophies compete between professions (compounded by those of other stakeholders) as they strive to find common cause. No sooner, as we shall see, is progress made in resolving one conflict than others break surface. The challenge is endless, the task never done, the strategies ever changing.

Chapter 2

Problems and their Implications

The antecedents of professionalism may lie in the mists of time, but not until the mid 20th century did concern about relations between the health and social care professions begin to build up. Why? No one explanation can account adequately for the problems that prompted mounting concern from then onwards to improve teamwork and other forms of collaboration in health and social care. Different commentators offered different explanations for different problems, without reference to each other. With benefit of hindsight, those problems can be seen to be compound, adding greatly to the complexity of the challenge for IPE.

Exposing a fallacy

For Carrier and Kendall (1995) the "structural fallacy" had been exposed. Relations, they said, had long been problematic between hospital and community-based health services, between health and local authorities, and between a nationally-led health service and locally-led social services, but machinery installed to co-ordinate services had been at best partially successful (see also Challis et al., 1988; Leathard, 1994). Integration of some services had invariably distanced them from others (Leutz, 1999). Establishment of local authority social services departments (Seebohm, 1969), for example, had brought branches of social work within a single organisation at the price of making relations more remote between health and social care, in general, and between GPs and social workers, in particular (Barr et al., 2007). Nor had integration always resulted in closer collaboration 'at the coal face' between professions within the same organisation, for example, health and social work personnel in the unified Health and Social Services in Northern Ireland as Challis et al. (2006) later observed. Recurrent restructuring had redrawn boundaries and redistributed power and responsibilities, not only between organisations but also between professions working in them, destabilising roles and disrupting relationships.

The timing of Carrier and Kendall's assertion was significant, during a period of right wing government when centralised planning had fallen into disrepute, replaced by a mixed economy of welfare that valued competition more than collaboration. Service delivery was divided between statutory, voluntary and private sectors. Internal markets within the NHS locked practitioners in competition between trusts, with professionals finding themselves on opposite sides of the purchaser/provider split.

Living with management

For Owens and Petch (1995), the consensus between professions and management enshrined in the Welfare State since its inception had come under strain. Managers had begun to intervene in areas which professionals had traditionally seen as within their jurisdiction. Conversely, the presence of professionals in bureaucratic organisations had created potential for conflict with management, reinforced by separate and different educational systems for managers and for professional groups.

The challenge lay in finding congruence between the values of the professions and the objectives and ethical frameworks of the employing agencies. For Engel and Gursky (2003), managers responsible for ensuring collaboration had been liable to get at cross-purposes with practising professionals, notably physicians whose autonomy, judgement, discretion and oversight of others were most threatened. The hierarchical command-control relationship between physicians and their subordinate medical staff had come into conflict with interventionist styles of management, while horizontally assembled ways of working, like teamwork, could be perceived as threatening management's authority

Proliferating professions

For Gyamarti (1986), relationships between the health and social care professions had become more complex as they had grown in number and established more specialties, driven by exponential medical and technological advance. Furthermore, it was no longer possible for any one profession to name the range of other professions with whom it might be called upon to collaborate from time to time, let alone to understand their roles and responsibilities. Division of labour had become bewildering for the professions, more so for patients and their carers, and taken too far for policy makers and managers for whom fragmented service delivery and compartmentalised care reduced efficiency and restricted their freedom to deploy personnel optimally.

Strained relationships were compounded as the "semi-professions" (Etzioni, 1969) became upwardly mobile, threatening the pre-eminence of the established professions.

Warring tribes

For Bechter and Trowler (2001) the professions resembled warring tribes, an anthropological metaphor that Beattie (1995) observed was favoured by many managers faced with the multiple and conflicting specialisms found in the institutions of the modern state and one that he found "intriguing and attractive" to illuminate boundary change and boundary conflict in the health field. The medical and nursing professions had evolved separately for reasons deeply bound up with class and gender, but research since the 1950s had drawn attention to the profound impact of specialist training schools in shaping the identities, values and separation of the health professions. The time had come to realign those professions around biotechnological, ecological and communitarian models of health, although they would surely resist such a radical redrawing of boundaries.

Understanding identity

For Carpenter (1995), contact theory, developed from the work of Allport (1954), helped in understanding the origins of prejudice and ways in which it might be resolved between different social groups, e.g. professions, where members identified with their own group to the detriment of their relationships with others. Reciprocal perceptions were stereotypical (Hewstone and Brown, 1986). Out-groups tended to be seen as homogeneous, in-groups as more diverse. (See Barr et al., 2005 123-125 for further discussion.)

Sinking in semantics

For Pietroni (1992), the heart of the problem was communication. It was not so much that each profession used its own language, more that they had to employ and comprehend a repertoire of languages sometimes beyond the limits of their education:

classic science; the study of the mind; society and culture; traditional healing; alternative medicine, disease prevention and health education; ecology and environment; law, morality and ethics; research, evaluation and audit; and policy, management and governance. Pietroni's analysis anticipated interest later in discourse within and between professions.

Orienting towards the Community

For the Department of Health (1990), relocation of services from institutional to community settings which gathered pace from the mid-1960s called for more permeable, flexible, egalitarian and democratic healthcare delivery. Demarcations between professions which had seemingly worked well enough in hospitals proved to be neither helpful nor sustainable in the community where relationships were less hierarchical and boundaries more fluid and more ambiguous with the attendant risk of tension and misunderstanding. The medical role in diagnosis and treatment planning remained central in curative care, but roles were less clear, responsibilities more diffuse and leadership shared in preventive care.

Working in closer proximity

For Jefferys (1965), problematic relationships were exposed as professionals came into closer proximity in community-based teams. Misunderstandings and conflicts between professions that had not previously been apparent were exposed. The majority of GPs, according to Jefferys, were enthusiastic about the work of the district nurses[4], but nearly half spoke in critical terms about health visitors.

Echoing the same sentiments some years later, Bruce (1980) said that GPs understood the role of the district nurse whom they worked alongside, but some failed to understand that of the health visitor. Others understood well enough, but felt that the advice given by the health visitors was at best unnecessary and at worst ill-conceived. Health visitors were seen by social workers as authoritarian and unsympathetic towards hard-pressed parents and by GPs as strict and lacking in understanding. Some GPs even thought that the health visitor was unnecessary and could be harmful. Lack of trust between professions was manifest in an overemphasis on confidentiality. Better co-operation between professions, said Bruce, could not be achieved without major changes in both attitudes and working arrangements, but change was uncomfortable and threatening.

GPs regarded social workers as relatively junior employees of the local authority, whose main functions were to find home helps, sort out financial problems and rescue battered babies. Neither GPs nor health visitors thought that they were trustworthy. They were hard to contact and slow to take action, did not offer a 24 hour service nor remain long in the same post, never made time to discuss individual cases and never provided feedback. Invited though they were to the fortnightly meetings at one of the practices that Bruce studied, they were said to find that an ordeal. Save for one based in the local hospital, social workers attended for specific reasons only. Nor did they go to the lunchtime meetings convened by the community worker where GPs, police and health visitors were regularly present. Attendance at team meetings was far from assured, said Jefferys (1965), by any of the relevant professions, but social workers

[4] A relationship which nevertheless became more complicated, said Bruce, when the first practice nurses were appointed to work more closely with GPs and wholly within surgeries.

were often the notable absentees. Their usefulness, she argued, would be limited unless and until they became fully integrated members of the health team.

Comments about GPs were scarcely less critical. They too were said by the other professions to be difficult to contact, did not understand the work of other agencies and withheld information of importance. Jefferys (1965) thought that antipathy between GPs and nurses stemmed from pre-National Health Service days when the recipients of advice from the local authority services were those who could not afford to consult a GP. Dingwall (1978) suggested that GPs' relationships with community nurses were coloured by their previous experience in hospital life, others that tension between GPs and health visitors in primary care teams might have carried over from those between GPs and nursing personnel – district nurses, health visitors and midwives – employed previously by the local authority medical officer. Midwives had been reluctant to let GPs be involved in normal deliveries at home. Health visitors had either had no contact with GPs or had found the relationship unsatisfactory, while school nurses had arranged treatment for children without reference to the GP. These 'women' stood accused of being interfering, even officious and impertinent towards patients, giving medical advice, often incorrect or in conflict with the GP's treatment, and undermining 'his' authority with 'his' patients.

Furthermore, team members from different professions tended to have different perceptions of team structure, hierarchical for doctors, lateral for others. Some were inhibited in carrying out roles that had previously been clearly perceived, a state of affairs thought likely to continue unless and until they received teamwork training (Lloyd et al, 1973; Thwaites, 1976).

Coping with increasing complexity

For Pezzin & Casper (2002), problems presented by patients had become more complex. Better educated professionals may have learnt to spot more problems from more perspectives, but the impact of an ageing population was already becoming apparent. Extended life expectancy for people with disabilities was also adding to the number of patients with multiple and chronic conditions whose needs reached beyond the capacity of any one profession to respond adequately.

Rising public expectations

For Barr et al. (2005), that problem was compounded by rising public expectations. Demands were increasing inexorably for more and better services in a consumer driven society, reinforced by better education, media coverage and access to data about health and health care. Patients, who were often better informed about their health conditions, were more likely to be critical about the services that they received. Expectations exceeded the capacity of health services to respond. Ways had to be found to deploy resources, including human resources, more effectively and more efficiently.

Exposing shortcomings

For the public at large, failures in collaboration between professions had generally remained hidden from view unless and until they resulted in errors that prompted investigations, notably in child protection and psychiatric aftercare. Numerous inquiries since the 1950s into the abuse of children had led up to that into the death of Maria Colwell (DHSS, 1974) which had raised public consciousness as never before.

Others had followed. So too had inquiries into tragedies when discharged mental health patients harmed themselves or others (Department of Health, 1994). Report after report drew attention to situations where practitioners from different professions were each in possession of 'a piece of the jigsaw', which, had they been put together, would have warned of dangers ahead. Instead, information held by one profession was withheld from others until too late. Much as the practitioners might have preferred to deal with such tragedies behind closed doors, their professions were increasingly seen to be publicly accountable and subject to judicial inquiry under the watchful eye of the media. Heightening expectations and lessening deference towards professionals meant that the judgements of professionals were more likely to be questioned than in the past.

Reacting to stress

For Menzies (1970) occupational stress drove practitioners on to the defensive (see also Hinshelwood & Skogstad, 2000), stress that is inherent in health and social care but exacerbated by the quickening pace of change in the organisation and delivery of care, coping with more complex cases, responding to rising expectations and reacting to criticism. Defensiveness, understandable though it may be, is most damaging at the very time when give and take in a spirit of generosity and trust is most vital to share the load.

Shortcomings in professional education

For teachers like McMichael & Gilloran (1984), the cause for concern was closer to home: their growing awareness of the downside of the socialisation process during qualifying courses. Emerging evidence that students were entering their respective professional courses with preconceived prejudices about other professions may have seemed unsurprising; evidence that they completed their courses with those prejudices reinforced was profoundly disturbing. If education was part of the problem, it had to become part of the solution.

On reflection:

Numerous trends seemingly combined to make relations between the professions more problematic. Those trends were to gather pace during and after the years under review as the case for IPE became ever more compelling. Sources found were heavily weighted towards problems in community-based services then at a critical stage in their development. The assumption was that all was relatively well in hospitals and other institutions, an assumption challenged forcefully later.

Explanations ranged from the graphic to the decidedly academic. Any temptation to dismiss the former as overdrawn would be hasty when account is taken of the reputations enjoyed by the researchers and by the institutions that sponsored and published their work.

Far from improving relationships between professions, closer proximity could also expose problems. Neither teamwork nor integration of services ensured collaboration. Something more was needed. That 'something' for a growing number of those involved was IPE.

Chapter 3

Predisposing and Precipitating Factors

IPE built upon principles of adult education as it came to be adopted by professional programmes in health and social care. It benefited also from the integration of profession-specific schools into HEIs, the ending of the binary divide between universities and polytechnics, modularisation and the advent of open learning. Some programmes were launched in response to recommendations in official reports, whilst others were grassroots initiatives. Professional institutions lent strong support, reinforced by dedicated interprofessional organisations.

Predisposing trends

It is doubtful whether IPE would have been introduced to improve collaborative practice had it not been for favourable trends in education. Principles of adult learning, first formulated early in the 20th century (Dewey, 1938), were being applied in professional education, laying foundations for IPE. Independent and specialist schools for nursing and midwifery, professions allied to medicine and the complementary therapies merged with universities and polytechnics between the 1960s and the 1990s, making it easier to combine courses within a single and unifying academic, organisational and financial framework. That trend was helped further when the reclassification of polytechnics as 'new' universities in 1992 harmonised systems and diminished status differentials, paving the way to bring students together, not only from different schools but also from different universities.

Although some educational managers retained loyalties to the professions in which they had served, others appointed, for example, from the behavioural and social sciences were predisposed to look for commonalties in learning across professions and to encourage integration of courses and curricula. Modularisation of academic studies was extending to include professional courses encouraging 'mixing and matching' between professions. Open learning was expanding fast, spearheaded by the Open University, and reinforced in health care by the NHS Training Division. Save for nursing, high production costs could not be justified for single professions. Recouping outlay depended upon tapping multiprofessional markets. Costs associated with face-to-face, small group interprofessional learning, and lack of opportunities for practice learning, inhibited its development as open learning, but curricula were being reconfigured across professional boundaries, commonalities identified and put to the test. Harmonisation of vocational training as National Vocational Qualifications (NVQs), although never extended into professional education as seemed probable at one stage (Barr, 1994), set a precedent for radical restructuring that higher education could not ignore (see chapter 4).

Precipitating factors

These trends set the climate in which some of the many official reports recommending teamwork and collaboration began to make reference to joint training or to shared or common learning. The Dawson report (1920) recommended multidisciplinary teamwork within a single organisation for neighbourhood and preventive health services, but without reference to training. Younghusband (1959, on

closer collaboration between health professions and social work), Cumberlege (1986, on community-based nurses working with GPs in teams) and Griffiths (1988, on better collaboration between health and community care) also made no reference to training. But by the mid-1970s reports were also commending IPE to reinforce collaboration (Court, 1976, on integrated services to promote child health; Merrison, 1979 in the report of the Royal Commission on the NHS; Jay (1979 on redeploying and retraining workers with mentally handicapped people from health to social care).

The case was, however, most compelling in reports of inquiries into the abuse and death of children from Maria Colwell onwards (DHSS, 1974) in the confident expectation that 'joint training' would improve communication and collaboration between professions (see discussion in chapter 4), reinforced in guidelines (Department of Health, 1991a, 1992) to assist in implementing the 1989 Children Act which required close working relationships between professions and between agencies.

Meanwhile, a government white paper (Department of Health, 1989) had asserted the importance of "multidisciplinary training" for staff in all caring professions, spelt out subsequently in guidelines designed to explain the implications of the 1990 NHS and Community Care Act (Department of Health, 1991b). Those guidelines included an expectation that "joint training" be written into community care plans and included in personnel and training strategies.

Proposals for public health ran in parallel. Acheson (1988) and Hoffenberg (1990) both recommended the establishment of one or more school or institute of public health to facilitate multidisciplinary collaboration and training for public health practitioners. Soon after, the Royal Institute of Public Health and Hygiene (1992), having concluded that primary health care teams could play a more effective part in mental health care, developed a course comprising comprehensive training materials, distance learning and a team-training workshop. The Sainsbury Centre for Mental Health (Duggan, 1997) argued for a common foundation course grounded in core competencies for all professions working in teams for people with mental health problems. Meanwhile, the National Council for Hospice and Palliative Care Services (1996) had published a working party report to help educators develop basic education, including "multiprofessional education", about palliative care for doctors, nurses, social workers, occupational therapists, physiotherapists, pharmacists and clergy to raise awareness of the varying approaches of different professions, to establish common ground, boundaries and goals, and to recognise mutual dependency.

The Schofield report (1996) took a very different tack. Based on deliberations between health service managers (most of whom were human resources directors), it criticised the professions for their inflexibility. It recommended instead a multi-skilled workforce with generic carers, flexible working among professional groups, employer-led occupational standards for training, common core training and gateways to move between professions on which it based its case for IPE to remodel the NHS workforce. Schofield's recommendations aroused fears that IPE had a hidden agenda amounting to a veiled attack on the integrity of the professions. This perception was in conflict with the orthodox role of IPE as a means to cultivate collaboration based on mutual respect for pre-ordained roles, responsibilities and boundaries. According

to Pittilo and Ross (1998), Schofield's arguments reinforced resistance to IPE. Fears of 'educational engineering' were renewed. Sidelined by IPE exponents at the time, those arguments were far from dormant as support germinated for radical reforms in education and workforce policy in the years following this review.

Support from professional institutions

Regulatory bodies, royal colleges and other professional institutions lent much needed help in defining IPE and support for its implementation (see chapter 3)[5]. Suggestions that these bodies were resistant to IPE were wide of the mark, although the terms in which they supported it – collaboration based on mutual respect for integrity of functions and boundaries – may seem protective if not defensive to those like Schofield with a more radical agenda.

Alone amongst the regulatory bodies, the Council for Professions Supplementary to Medicine (succeeded later by the Health Professions Council) provided a single administrative and legal framework within which to promote IPE for those allied health professions within its remit.

Building in interprofessional support

Independent bodies were also being launched, dedicated to the promotion and development of IPE, notably the Centre for the Advancement of Interprofessional Education (CAIPE) in 1987 led by Dr John Horder with a UK-wide brief (see Appendix B) and, in the same year, Interact led by Professor Kenneth Calman (as he then was), which ran a rolling programme of conferences and workshops in Scotland moving from city to city. Meanwhile, Dr Patrick Pietroni and Marilyn Miller Pietroni were pioneering psychodynamic approaches to IPE through the Marylebone Centre Trust which they had established and in liaison with the Tavistock Centre. The Trust launched the Journal of Interprofessional Care in 1992 as a vehicle for national and later international exchange of experience and scholarship about interprofessional education, practice and research.

Other organisations launched at much the same time had broader terms of reference. The Health Professions' Education Forum (Thwaites, 1990) provided a meeting point for officers with lead responsibility for education and training in regulatory and professional bodies in health and social care to consider developments impinging upon professional, multiprofessional and interprofessional education, while the Standing Conference on Public Health promoted multiprofessional and interprofessional education in its field.

> ***On reflection:***
> *Experimental, ephemeral, marginal and controversial though IPE often remained, it was being planted in well tilled ground, endorsed in official reports, enjoying goodwill and practical support from professional institutions and dedicated interprofessional bodies. The next three chapters tell how it took root, grew and began to bear fruit.*

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[5] For example, projects under the auspices of the Royal College of General Practitioners included its practice team awards, exploratory discussions with the Open University regarding courses for primary health care workers and the Commission for Primary Care established under its wing which ran the Prince of Wales Fellowship Scheme.

Chapter 4

Workshops and Conferences

Many of the earliest IPE 'initiatives' reported in the UK were isolated, small-scale, employment-led workshops or short courses as their pioneers tested first one means and then another to cultivate understanding, trust and collaboration between professions. Most were in primary and community care. Few were recorded, although enough accounts survive to recapture the single-mindedness and clarity of purpose that inspired them. Some enjoyed support, advice and encouragement from an alliance of central training councils and professional bodies. Although many remained local and one-off, others were included in centrally-led rolling programmes. These moved beyond introspective preoccupations with working relationships, enlisting the participant professions in combined action to promote health education and improve services.

Primary health and community care

John Horder (1974) credits Kuenssberg with launching the first 'initiative' in 1966 - a two day symposium in London on "Family Health Care: the Team" to explore working relations between general practitioners, district nurses and health visitors (Kuenssberg, 1967; see also Hawthorn, 1971). Three royal colleges – for general practice, midwifery and nursing - sponsored the meeting with the Queen's District Nursing Institute, the Health Visitors' Association and the Society of Medical Officers of Health. The significance of the occasion was further reinforced by the presence of Kenneth Robinson, the then Minister of Health, as keynote speaker.

Further encouragement came in 1971 when the Royal College of General Practitioners (RCGP) with the Council for the Training of Health Visitors (CTHV) and the Council for the Training of Social Workers (CTSW) jointly recommended that regional arrangements be made for interdisciplinary meetings. The same three organisations, joined by the National Institute for Social Work Training, convened the "Windsor Group" to discuss co-operation and conflict in community care (Bennet et al. 1972). They then convened a two-day seminar where general practitioners (GPs) and social workers concluded that one of the most emotive issues was the extent and nature of future relations between their respective professions following the creation of social services departments in the wake of the Seebohm Report (1969). Freeing social workers from medical control had, according to Martin and Mond (1971), led to problems, but improving working relations would also need to include health visitors, whose role was seen to overlap with those of both GPs and social workers.

The debate prompted a five-day seminar at Cumberland Lodge in Windsor Great Park where recently qualified practitioners from these three professions explored each other's roles and identities, dissipated prejudices and acknowledged stresses in their

working relations. GPs had reportedly failed to understand that health visitors had become independent practitioners with skills in preventive medicine, which in some ways went beyond their own. Neither GPs nor health visitors had yet accepted social workers' claims to their own specialist field. Many GPs preferred to pass social problems to health visitors when referrals to social services departments reportedly led to rejection, rationing or delay. The core knowledge and skills of each profession, said delegates, had to command the respect of each of the others before liaison could be effective, and services become flexible and responsive. The roles of all three professions had broadened. Increasing overlap between them argued for common studies in pre-qualifying education.

Another course was held in Nottingham in 1974 (Thwaites, 1993) and yet another in 1975 for senior teachers (Flack, 1976) with a follow-up in 1977 (Flack, 1979a). A joint letter was also sent by the CTHV, the CCETSW and the RCGP to course leaders for general practice, health visiting and social work recommending that "regional arrangements be made for interdisciplinary meetings for discussion of common interests and problems in dealing with patients". Initiatives followed in Oxford (Hasler and Klinger, 1976) and Manchester (Lloyd et al., 1973). The latter considered problems facing primary health care teams and was noteworthy at that time for the theoretical perspectives introduced and the independent observation of process which generated a rich vein of insights into relations between the professions present. Participants agreed to continue meeting in a series of further workshops (of which there were at least eight) to address questions associated with role, status and communication and to differentiate between personal and interprofessional problems, taking into account thinking then gaining currency about experiential groups.

Observations from one of these regional workshops echoed those reported above from London. Health visitors and GPs found district nurses reticent and defensive – doers rather than talkers. Social workers said that GPs did not easily recognise all the social needs of their 'clients'. Health visitors said that teams worked better when nurses and health visitors were diplomatic in their approach towards GPs. Difficulties could arise when male social workers were unwilling to be deferential. The health visitors saw themselves as buffers between dissatisfied GPs and the new social services departments. But some social workers seemed to have deep-seated prejudices toward health visitors who wanted, they said, to be all things to the patient. The GP's position at the top of the status tree was accepted reluctantly by the nurses, resented by the health visitors and rejected by the social workers. Such difficulties were, however, said to be capable of resolution by personal contact (Thwaites et al., 1977).

The seventies ended as they had begun with a national consultation, this time in Nottingham, convened by a similar grouping of professional and regulatory bodies (England, 1979). Preoccupations were much the same as in 1971. There was concern about the location of social services in local authorities instead of in health authorities, lack of social work attachments to general practice and the need to put health and social care together again. Speakers recognised, however, that getting organisation right was only a beginning. Respective roles had to be understood better before skills would be fully used (Marre, 1979). The professions had to be trained to see the need for a team approach. Teaching had to be about the needs of the whole person. Rivalry had to be faced. Good education should teach humility, beginning with the teachers. Only then would professionals recognise their own limitations and the need to work

with others who had complementary skills (Beales, 1979). Learning together should improve interaction between professions and facilitate mobility between roles and occupations. Different professions had different styles of learning and different constructions of reality, which gave every profession a different contribution (Bligh, 1979).

A standing group was established following the symposium representing district nursing, general practice, health visiting and social work. A joint statement was issued by the parent bodies on "the development of interprofessional education and training for members of primary health care teams" (RCGP et al. 1983) and a handbook published for use in "multidisciplinary training" (Flack, 1979b).

A joint working group of doctors, nurses and midwives (Harding, 1981) examined problems associated with establishing and operating primary health care teams. It called for communications and interpersonal skills training in uniprofessional training for doctors and nurses, with "an element of preparatory training for team working", although it acknowledged that that might not always be possible in a multidisciplinary setting. The potential contribution of primary health care teams to practice learning also needed to be more fully recognised.

Yet another national conference was held in 1984 at Middlesex Polytechnic (now Middlesex University) when participants backed a proposal to establish a permanent central organisation to support and co-ordinate interprofessional learning (Carmi, 1991). A working party followed, leading to the founding of CAIPE in 1987 (see Appendix B).

In the same year, 'Interact' began to organise regular conferences for health professions in Scotland. These catered for a wider range of professions than did CAIPE and focused on developing collaboration on the ground.

Meanwhile, local initiatives continued to complement national. In London, Samuel and Dodge (1981) ran a series of day seminars for trainee GPs and recently qualified social workers to explore areas of doubt and misunderstanding about each other's ways of working. In Devon, Jones (1986) ran "novice days" for recently qualified general practitioners, nurses, therapists and social workers where each profession made a presentation about itself for the benefit of the others, observed case conferences, and made joint home visits. Short courses were also reported for GP trainees and health visitor students (Flack, 1979) and for district nurse and health visitor students in Kent (Klinger, 1979).

During the 1980s the Health Education Authority (HEA) capitalised upon the growing interest in shared learning to launch a travelling 'circus' of workshops throughout England and Wales designed to enlist primary health care teams in health education. Each team was invited to send three participants from different professions to the same workshop. Each threesome then selected an aspect of health education to be promoted in its centre and developed an action plan during the workshop. Groups were targeted, campaigns conceived, services outlined, obstacles identified and ways devised to overcome them. Introducing cervical screening, and tackling alcohol, drug and tobacco abuse were the most common (Spratley, 1990a).

Regional workshops followed to train members of Local Organising Teams (LOTs) who were to be responsible for mounting rolling programmes of workshops. Experience gained from the national programme would thereby be disseminated as the number of workshops multiplied (Lambert et al., 1991; Spratley, 1990b). Workshops reached beyond health education, tackling almost every topic of the day from multidisciplinary audit to GP fund holding.

It would be hard to overstate the contribution that the HEA workshops made to team development in primary health care. Barriers came down between professions and between centres, as workshops became more widespread. Above all, a cadre of skilled and experienced facilitators was established, on whom primary care centres could call.

The HEA was one of several organisations to mount ongoing programmes nationally as IPE initiatives became less ephemeral, less isolated and more coherent. CONCAH (Continuing Care at Home) developed a cyclical model inspired by the success of the HEA workshops (CONCAH, 1989), based on the work of Kolb (1984) combined with audit cycles developed by the Royal College of Physicians and by CONCAH itself. Each workshop lasted a day and was built around group work where participants grounded their discussion in work experience as they identified problems relating to patients with a particular condition. An expert panel responded followed by presentations (live or on video) by patients and/or their carers. This led into group work in practice teams to formulate management plans.

The Parkinson's Society supported two of CONCAH's pilot workshops in 1992. Each brought together interprofessional teams of three to six involved in the management of Parkinson's disease. Follow-up found that plans agreed by teams were still in action six months later with members reporting that collaboration had improved. Ten further workshops were convened between 1993 and 1995 for more than 250 participants. Feedback was consistently positive.

The HEA programme also prompted the Oxford Prevention of Heart Attack and Stroke Project to establish the National Facilitators Development Group to undertake continuing work to train facilitators to help primary care teams acquire 'the tricks of the trade' and to design preventative programmes (Fullard et al., 1984 & 1987). The Cancer Relief Macmillan Fund and the RCGP supported five Palliative Care Facilitator Projects working with primary care teams throughout the UK and made recommendations to extend its work (CAIPE, 1996).

The facilitator's job included helping primary care teams to:

- discuss prevention and set objectives;
- help GPs to recruit practice nurses;
- train nurses in prevention;
- introduce audit.

By 1988 there were some 50 of these facilitators in post throughout the UK. Most were nurses, although backgrounds differed. Support for practice nurses became a critical part of their role (Astrop, 1988).

LOTUS (Learning Opportunities for Teams) was similar. It facilitated continuing

education for eight primary care teams in Yorkshire and the East Midlands for about a hundred staff (Pirie and Basford, 1998). Each team was offered up to six two-hour workshops with a pair of facilitators from different healthcare professions. Learning was reflective and portfolio based. Teams chose a wide range of learning topics including communication skills, diagnosing and managing depression and diabetes, hormone replacement therapy and osteoporosis, resuscitation, dealing with violent patients, health promotion, staff mentoring and change management. Each workshop was evaluated by means of semi-structured interviews and completion of the Primary Health Care Teams Questionnaire (West and Pillinger 1996; West and Slater, 1996). Responses were positive, participants reporting enhanced teamwork. This encouraged LOTUS to hold workshops later in Italy, Spain, Belgium and Denmark (Pirie, 1999).

Some areas established their own resource units, for example in Liverpool, leading to five years of development (Thomas, 1994). Two facilitators worked with their fellow GPs and nurses during the first stage (1989-1991) to break down isolation between practices, to promote the employment of practice nurses and to encourage a reorientation from one-off treatment of disease towards participation in health. Meetings were held to look at clinical, contractual and organisational issues, and to float new ideas. "The Liverpool Health Diary" was published to provide GPs and nurses with health information and a directory of resources. Six mentors were appointed to support the rapidly growing number of practice nurses. Patients were interviewed in waiting rooms about health hazards at work. One project even offered daffodils in exchange for cigarettes!

During the second stage (1991-1994) an enlarged team of facilitators comprised a GP, a health visitor, a practice nurse and a practice manager. The target group was also widened to include district nurses, GPs, health visitors, practice managers, practice nurses and receptionists, and, so far as possible, workers in schools, the voluntary sector and community groups. Promoting more effective teamwork was one of the priorities. Methods included forums, workshops and road shows.

Community care

Many of the early initiatives covered primary health and community care. Separate developments followed as the two fields began to be differentiated following the implementation of policies for 'care in the community' from the 1970s onward with the closure of long-stay mental handicap and psychiatric hospitals. Separation was reinforced when social services departments were established. From then on, most initiatives focused either on primary care or community care, although the need to build bridges between them became pressing.

Progress seems to have been faster in Scotland than in England. There the Social Work Service Group and the NHS Management Executive commissioned the University of Dundee to facilitate workshops, offer consultancies and develop training networks to help implement community care policies (Rowley, 1993). The 'Inter-Change Programme' responded to local initiatives. Its aims signalled moves to extend collaboration beyond teamwork, including relations between agencies and between management and practice. All initiatives were interprofessional. Each was jointly mounted by more than one type of agency with an emphasis on new and better services for users and carers generating "champions for change". Issues tackled were

invariably local.[6]

Primary and community care reunited

Some health and social services managers were concerned that primary and community care had drifted apart. They convened joint meetings for their respective staff to discuss the 1990 NHS and Community Care Act and its implications for their agencies, appearing on the same platform to demonstrate solidarity. William Horder (1996) described strategic planning for "interagency training" between statutory and voluntary sectors in health and social services in a London borough. A strong lead from central government, he said, had resulted in priority being given to measurable short-term change at the expense of long-term goals. Topics covered by the training included updating, needs-led assessment and care planning, meeting the needs of service users and carers, working in partnership, cross-cultural communication, welfare benefits, discharge planning and after-care, protecting vulnerable adults and the role of the key worker.

The NHS Training Directorate and the Social Services Inspectorate set up the *Caring for People* Joint Training Project to ensure that an integrated approach to care was supported by appropriate training and organisational development. Reviewing that project, Carpenter et al. (1991) found widely differing developments of shared learning in seven English areas following the implementation of the NHS and Community Care Act. Authorities, it seemed, were making a fresh start, even though there was a wealth of experience upon which they might have called.

One such project was led by Lonica Vanclay, then Director of CAIPE. She brought together practitioners, trainers and managers who had participated in events and projects to develop collaboration following the implementation of the NHS and Community Care Act to explore how collaboration between health and social services in general, and GPs and social workers in particular, could be sustained (Vanclay, 1996).

Regular contact, understanding each others' roles and responsibilities and working together on local activities were, she said, important in sustaining collaboration. However, appropriate education and training was the most important influence. Examples from practice suggested that training events were more likely to be successful if they were local, participative, short, focused, not too frequent, held at lunchtime, aimed at clarifying respective roles and reinforced by shared information. The key to sustained collaboration, said Vanclay, lay in embedding a continuous and collaborative learning culture that began during qualifying education and extended into continuing learning opportunities. Management backing, national leadership and a supportive policy framework were critically important.

HIV/AIDS

Some community-based initiatives focused on the needs of particular groups. The formation from the1980s onwards of multidisciplinary teams to care for people with

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[6] They included: user and carer involvement; hospital discharge arrangements; assessment and care management; contracting and commissioning; GP involvement; local needs analysis; community care planning; quality assurance; advocacy; mental health development; and moving from hospital to community settings.

HIV, numerous study days, conferences and support systems were set up to educate staff and help them cope. For example, FACTS – "Foundation for AIDS Counselling, Treatment and Support" - in Crouch End, North London - ran weekly lunchtime education sessions for GPs, district nurse, dieticians and others, complemented by similar meeting in Camden & Islington around attitudes, team working and collaboration[7].

Child care

Developments in IPE for child care were proceeding in parallel, although communication with those in primary and health care was minimal, save through CAIPE.

Despite the arguments advanced in successive reports for 'joint training' for child protection, Birchall and Hallett (1995) found that provision for experienced practitioners was very limited. Over 40% of a sample of 338 professionals working in child protection in English health and local authorities (social workers, health visitors, teachers, police, GPs and paediatricians) had had no relevant in-service training about any aspect of child abuse. Some of the events described as interprofessional did little more than bring together a mixed audience in one room doing little to enhance mutual understanding (Stevenson, 1995). Several organisations were, however, working to promote IPE for child protection.

The National Children's Bureau, the National Society for the Prevention of Cruelty to Children and the University of Nottingham (Charles and Stevenson, 1990 a&b) combined their expertise to support local initiatives. They sponsored the first joint conference (Hendry, 1995) where participants identified a number challenges:

- Variable support for joint agency training amongst service managers;
- The need to develop training strategies owned by ACPCs;
- How to engage professional groups who played key roles in child protection, but seldom participated in inter-agency training.

The Training Advisory Group on the Sexual Abuse of Children (TAGSAC, 1988) made the case for "multidisciplinary agency training" following the Butler Sloss report (1988) into multiple allegations of such abuse in Cleveland. TAGSAC argued that no one profession should have priority in training provision. All those concerned should train and work together.

The Michael Sieff Foundation was created to foster development and innovation in the care of abused and neglected children, and had held eight annual conferences at Cumberland Lodge in Windsor Great Park by 1995.

> ***On Reflection***
> *Work based IPE had developed during 30 years from isolated initiatives into an incremental and developmental movement. Initiatives were reported in the fields of ageing, child protection, community and primary care, health education, learning disabilities, physical disabilities and public health. Surveys reported in chapter 8 provide some clues to the distribution of IPE, but the prudent reader will be well advised to treat examples given in this*

[7] I am indebted to one of my anonymous reviewers for this example.

chapter (and the next two) as indicative rather than representative. IPE initiatives in universities (as succeeding chapters explore) sprang from different roots. Some links are, however, apparent between the work-based developments and post-qualifying university-based IPE, for example, in public health.

Chapter 5

Multiprofessional and Interprofessional Post-qualifying Studies

Most of the combined post-qualifying initiatives in universities were multiprofessional. Their aims had little to do with collaborative practice, but interprofessional objectives were sometimes introduced later in response to the needs and expectations of the (mostly part-time) students. Few if any discrete IPE programmes were established. Some were marketed as such although, on closer examination, they combined both multiprofessional and interprofessional objectives and content, which may have been their strength.

Universities were responding to the need for continuing professional development by launching post-qualifying programmes, in parallel with work-based IPE reported in the last chapter. Most were multiprofessional. An attempt to provide comprehensive coverage would far exceed the scope of this chapter. I have focused instead on those post-qualifying multiprofessional developments that generated opportunities for interprofessional learning.

Masters' courses were better documented than other multiprofessional postgraduate courses for health and social care personnel, thanks to a postal survey and telephone interviews by Storrie (1992) of provision at 15 universities in England and Scotland by means of. Twelve of the 15 provided information. Only one course had started before 1990, although all but one was based in an established academic department with a track record in health and social care studies.

Several enjoyed external support. The Scottish Office, for example, had funded the Centre for Child Protection at the University of Dundee, which ran one such course, whilst Age Concern had funded the MSc in gerontology at King's College London. Local pressures had, however, also generated support for many of these initiatives, for example, a series of postgraduate courses at the University of Exeter had responded to the needs of practitioners in an isolated region. Similarly, the University of Hull provided post-qualifying courses in close association with neighbouring health and local authorities.

Despite commitment to multiprofessional learning, most of the courses that Storrie found were based in traditional single discipline academic departments. Exceptions were noteworthy, for example at the University of Southampton, where masters' courses in psychiatric medicine and palliative medicine were the joint responsibility of medical and social work departments. Similarly, at the University of Hull two such programmes were run jointly by nursing and social sciences departments (in one case also including the psychology department).

The 12 universities provided information about 21 programmes focusing variously on:

- A client group, e.g. older people, mental illness, learning difficulties, child protection;
- Care delivery, e.g. community care, primary care and counselling;
- Planning, organisation and management of services;
- Interprofessional learning and working;
- Other, e.g. medical and social anthropology.[8]

Additional information was available from the University of Exeter (Pereira Gray et al., 1993; Goble, 1994), which claimed in 1986 to have launched the first multiprofessional masters' course in health and social care, one of two there that grew out of more modest multiprofessional initiatives dating back to 1973. It had two aims: to enable nurses, physiotherapists, occupational therapists, social workers and others to compensate for limitations in their earlier pre-qualifying education; and to complement practice experience with a grounding in the social sciences and research skills. The first intake included therapists, GPs, a health visitor, a health service manager and a practice nurse.

South Bank Polytechnic (now London South Bank University) had launched, as noted by Storrie (1992), the first UK masters' course marketed as interprofessional. According to Leathard (1992), that initiative was prompted by five considerations. The first was the opportunity to build on established diploma, degree and post-graduate courses for nurses, health visitors, health educators, social workers and nurse educators. The second was the need to offer progression to those students who hitherto had had to go elsewhere for masters' level studies. The third (and this is where the interprofessional focus came in) was the staff driving the proposal who were "interested in the whole concept of learning together to work together" with unqualified support from the Dean of the School. The fourth was the knowledge that the then Council for National Academic Awards and the NHS Training Authority were encouraging interprofessional initiatives. The last was the case made in successive reports for integration in health and social care practice.

Teachers planning the course were fired by the belief that there was none other of its kind. They commissioned market research to make sure that there was indeed a demand for the course and consulted national training bodies. The demand, it emerged, was for a part-time masters', the outcome a two-year, modular course comprising a first-year foundation grounded in research and a second year concentrating on interprofessional work with a dissertation. Learning methods were grounded in the philosophy of reflective practice (Schon, 1987).

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[8] Degree titles were: Health Care - Professional Education; Health Care; Gerontology (3); Interprofessional Health and Welfare Studies; Mental Health; Psychosocial Palliative Care; Care of People with Learning Difficulties; Care of Elderly People; Community Care (3); Child Protection (2); Policy, Organisation and Change in Professional Care; Applied Psychology in Mental Handicap Services; Medical Social Anthropology; Applied Psychology of Mental Health Services; Community and Primary Health Care - Towards Reflective Practice; and Counselling

Two other explicitly interprofessional masters' courses were launched soon after, one at the Marylebone Centre Trust in association with the University of Westminster and the other at the University of Central England in Birmingham (Gorman, 1995).

The remaining master's programmes found by Storrie, albeit not established primarily to focus on the promotion of interprofessional understanding and collaboration, had developed such teaching and learning as an extension of their original orientation. All included interprofessional objectives, although their importance varied.

All were recruiting from several professions, including between them the allied health, clergy, housing, pharmacy, planning, police, medicine, nursing, social work, and youth and community work. All said that they had tried to attract as wide a spread of professions as possible, but none claimed to have achieved a balanced intake. With few exceptions, doctors were only recruited to courses based in medical schools.

Some of the same universities were also offering postgraduate certificate and diplomas as stepping-off points for masters' degrees.

Improving Practice

Accounts were also being published of other multiprofessional and interprofessional postgraduate certificate, diploma and masters courses. Three of the many advanced professional courses launched at the Tavistock Centre are especially apposite. One was in matrimonial conciliation and two in child protection. All three combined multiprofessional and interprofessional objectives.

The first responded to concern about failures in collaboration between agencies and between professions working with couples seeking to resolve matrimonial problems. Woodhouse and Pengelly (1991) facilitated fortnightly workshops comprising GPs, health visitors, marriage guidance counsellors, probation officers and social workers. Each profession had its own workshop during the first six months, re-forming into mixed groups for the following two years with a further six months for evaluation. A group member presented a current case – often worrying or perplexing - at each meeting.

The aims were to develop existing knowledge of how marital stress may be linked with other problems that preoccupy social and health services, and to study and seek to improve working relationships between practitioners from different agencies and different professions, since responsibilities were often shared. The evaluation was noteworthy for the insights that it offered into the psychoanalytic concepts of projection and transference, where denial and splitting between two parties to a marital relationship induced similar behaviour between agencies and between professionals working with them.

The other two courses were planned in consultation with a London-based consortium and implemented proposals from the then ENB and the then CCETSW "to determine an effective model for the development of shared teaching and learning in courses preparing nurses and personal social services professionals for their roles in child protection". Two courses were piloted.

The shorter one was competency-based. Outcomes included the ability to work with

other professionals, to ask for help and refer cases when appropriate, within a common framework of knowledge and understanding of law, policy, practice and procedure. The learning approach was active, experiential and facilitative, making full use of peer group learning. Participants met one day per week for ten weeks organised into three modules. They came from nursing, therapy, police, leisure services and youth work. Health visiting and social work were excluded because the content should have been covered during qualifying courses. Their absence did, however, set limits to the extent and nature of the interprofessional learning.

The aim for the longer course was to enable participants to work effectively in multiprofessional networks, by providing "serious intellectual fare", including knowledge of research methods and findings, law, and a range of theoretical and conceptual frameworks while remaining firmly rooted in practice. Emphasis was again put on learning from experience. Participants met for a day every two weeks over two years. They came from social work, health visiting and other branches of nursing (Stanford and Yelloly, 1994).

But the major contribution to IPE from Tavistock Institute's had long been group dynamics course, in association for many years with the University of Leicester. Reviewing their contribution, Allaway (1971) describes 'T- groups'[9] around which they revolved as "adventures in the study of intra- and inter-group relationships and transactional behaviours and the exploration of ways in which the learning gained through their study may be brought to bear upon everyday living". Each T-group comprised about 15 members with a trainer as basic unit within a two or three week course in group dynamics.

The wider influence on IPE of this approach to learning was reflected in courses run by the Marylebone Centre Trust (see Chapter 6) in a health and social care context, and by the Grubb Institute from a Christian perspective.

Together, these courses recruited from a wide spectrum of professions including police, probation and prison officers as well as education, health and social care on which this paper focuses. Courses built in interprofessional learning, made explicit in the case of the Marylebone 'Pride & Prejudice' courses. They also provided a bridge between learning for practice and for management, to which we now turn.

Preparing for Managerial Roles

Management studies have a long history in both health and social services. Conceived for managers, some programmes were extended to include practising professionals, as their managerial responsibilities came to be more fully acknowledged. Many were specific to health or social care. Others were generic, bridging health and social care or different local government departments, creating opportunities for interprofessional learning.

Programmes in social care dated from the inception of social services departments in 1970, when managers, drawn mainly from the ranks of social workers, found themselves coping with a scale and complexity of responsibility for which they had not been prepared. Universities responded with everything from short courses to

[9] i.e. Training groups

masters' programmes. The Local Government Management Board held the brief for developments throughout England and Wales, working closely with the Institute for Local Government Studies (INLOGOV) at the University of Birmingham. The Board emphasised work-based study and took a generic view of management studies across local authority departments. Particular provision was nevertheless made for the care sector, including courses leading to the Diploma in the Management of Care Services. The Department of Health also promoted a number of initiatives in the `Developing Managers for Community Care Programme` and the 'Implementing Caring for People' projects.

Lead responsibility for management studies in health rested with the NHS Training Division[10]. It generated learning materials for work-based use in guided individual and group study, notably the Management Education Scheme by Open Learning (MESOL). This comprised two main programmes - one for first line managers in the Health Service only, the other for middle and senior managers throughout the care sector, entitled "Health and Social Services Management" (HSSM) (NHS Training Directorate, 1993a).

Moves to extend management studies for health to include social care sprang from a partnership between the NHS Training Division and the Social Services Inspectorate. A joint national project focused upon empowering middle managers for effective partnership between health, social services and not-for-profit sectors to meet standards for community care. It started from the premise that people who develop their capabilities together are more likely to work effectively together. Twenty-four managers from the three sectors formed two learning sets that met from the autumn of 1990 to the spring of 1992. Their experience exposed obstacles to joint working between health and social care organisations resulting from differing goals and objectives, conflicting demands and communication problems (NHS Training Directorate, 1993b). Experience gained from the project assisted in designing the 'HSSM'. Work commissioned from LBTC Training for Care (LBTC, 1993) demonstrated scope for joint management development and the contribution that HSSM could make.

Preparing for Public Health Roles

Post-qualifying courses in public health were relatively isolated from other developments in multiprofessional and interprofessional education for health and social care professions. They originated in public health medicine, but were extended to include students from other professions. Schools and institutes had been set up (following the recommendations of the Acheson report, 1988, see Chapter 3) in most regions by 1990, although some were reportedly more successful than others in combining professions (Streetly, 1992). Courses leading to the degree of Master in Public Health were launched, sometimes complemented by conferences and short courses open to a range of professions.

Preparing for Health Education

The development of postgraduate diploma courses in health education sat more closely in the mainstream of multiprofessional and interprofessional education. The Health Education Authority (HEA) promoted multiprofessional courses for primary

[10] Formerly the NHS Training Authority later to become the NHS Training Directorate.

care professionals in polytechnics, including Bristol, Leeds and London South Bank, in parallel with its travelling circus of workshops (reported in Chapter 4). These diploma courses provided generic studies for students from a range of professions to prepare to become health education officers. The HEA also promoted masters' degrees in health education in medical schools, including Edinburgh, Manchester and Nottingham, to enable professionals to transfer into that field, while one at Chelsea College provided a forum to relate health education to participants' existing fields (Beattie, 1994a).

The Open University

Most of the courses offered by the Open University defied easy classification. The same course catered for students from a wide spectrum of professions at different stages in their education and experience, as well as for interested members of the public. Many, however, informed aspects of health and social care practice, but typically lacking direct engagement with students' work settings and hence ill-suited for interprofessional learning, despite claims sometimes made to the contrary.

The Diploma in Health and Social Welfare was an exception (Harden, 1993). Its profile included courses on roles and relationships, community care and health and wellbeing, with opportunities for reflection on experience and to consider strategies for innovation and change. Tutorial groups and self-help groups included students from diverse professional backgrounds (and non-professional groups) with the chance to enrich understanding by learning from each other and to explore how the work of their own profession complemented that of others.

Preparing for professional and interprofessional teaching

Developments in IPE at the pre-qualifying stage, as discussed in the next chapter, depended for their effectiveness upon the calibre of their teachers and facilitators. Good preparation was critical. It was sometimes combined for uniprofessional, multiprofessional and interprofessional courses, as the following examples illustrate.

The University of Exeter pioneered a weeklong residential course for GP trainers, which was later extended to include nurse trainers on an experimental basis (Pereira Gray et al., 1993). Both groups were thought to require help with educational theory, curriculum design and assessment techniques, and in developing interpersonal and communication skills. Furthermore, the time seemed to be ripe for them to learn together in an effort to overcome barriers that impeded relations as colleagues in primary health care teams. The aims included becoming familiar with the principles of teamwork and resolving problems in working with others. Following an initial exercise to cultivate cohesion, each participant was assigned to one of three sub-groups based upon the results of personality tests and questionnaires to evaluate learning styles. Each sub-group augmented and elaborated its aims and objectives for the week. The first three days were "fairly structured" for the whole group, but for the remaining two days each sub-group chose its own topics. This programme led in 1988 to the introduction of an additional MSc course in professional education. Progress in establishing masters' courses encouraged Exeter to offer multiprofessional masters' and doctoral research opportunities.

Mhaolrunaigh et al. (1995) reviewed the preparation of teachers for learning shared between branches of nursing in England, but found few examples. Seventeen centres

had delivered ENB approved teacher preparation. Of these, 12 provided information. The majority offered shared learning between the branches, but half focused on theoretical learning alone with no teaching practice. There was little evidence that principles of shared learning were being applied within teaching practice. Nor did the review establish agreement between the centres regarding the objectives of shared learning between the teachers. The ENB was, however, already party to a joint initiative with an interprofessional focus.

The CCETSW, the ENB and the College of Occupational Therapists had launched the Joint Practice Teachers Initiative (JPTI) in 1989 to pave the way for interprofessional practice learning which they believed might hold the key to collaborative practice (Brown, 1992; Bartholomew et al., 1996).

The initiative was grounded in three principles:

- That effective professional education was rooted in competency based models of professional activity;
- That training should concentrate on the tasks and responsibilities of professions and employing authorities;
- That training be organised collaboratively in order to emphasise common elements in "repertoires" of the various care professions.

Key components of the JPTI were:

- The development of self as practice teacher/clinical supervisor;
- Exploration of adult learning theories;
- Achievement of skills in assessment.

With three "value added" elements:

- Equal opportunities and anti-racist and anti-discriminatory practice;
- Professional collaboration in community care;
- Supervision at arms length.

Impending implementation of policies for community care reinforced resolve to secure collaboration across professional and agency boundaries, prompting the Department of Health to fund thirteen JPTI projects throughout England in successive waves.

Building on the experience gained, the three sponsoring organisations commended (with modest financial support) a core module for practice teachers to be mounted locally and jointly between neighbouring universities (ENB, 1992). This was accompanied by a practice guide based upon the outcomes of workshop in York where lessons learned from the JPTI had been reviewed (ENB & CCETSW, 1996).

A Review

A working party convened by the Standing Committee on Postgraduate Medical and Dental Education (SCOPME, 1997) conducted a three-stage review of "multiprofessional education". During the first stage, the group invited comments in writing, orally and during two workshops. During the second stage, it distributed some 3,500 copies of a working paper with an accompanying questionnaire to which 400 responded. During the third stage, the group researched three examples of multiprofessional learning and working.

The outcome was the following definition of multiprofessionalism which equates with interprofessionalism in this paper:

> *"A team or group of individuals with different and complementary skills, shared values, common aims and objectives".*

Multiprofessional learning took place, said the working party, through multiprofessional working. They could not be separated. There was no one right way to achieve effective multiprofessional learning and working. Autonomy, in a climate of equity and mutual respect would enable practitioners to develop their own ways of effective learning and working together.

> ***On Reflection***
> *Some uniprofessional opportunities remained, including those approved by regulatory bodies for their professions, but universities were acting on the premise that continuing professional education needs were held in common across all or many professions, freed from profession-specific constraints. Common curricula followed, although students might still apply their learning to their particular professions and fields of practice through assignments. Interprofessional education, like the grit in the oyster, challenged this assumption, so that students could explore not only similarities but also differences to inform complementary and collaborative working.*

Chapter 6

Intra-professional and Interprofessional Qualifying Studies

Four collective movements synthesised qualifying studies for clusters of professions. Each was preoccupied in the shorter-term with forging closer working relationships between those professions, but progress paved the way for more broad-based participation in IPE. Proposals for 'joint training' in the field of learning disabilities were more problematic and development more chequered, but no less significant in breaking the mould of professional education. Reforms in lower levels of vocational training at one stage seemed likely to gravitate upwards into professional education. Had they done so, rationalisation would have been radical. Two reviews of IPE at the qualifying stage summarised in this chapter should be read in conjunction with the broader-based reviews and surveys summarised in Chapter 7.

Conventional wisdom long held that IPE was better left until after qualification when practitioners had found their respective identities and had experience under their belts to share. Steps were, however, being taken as early as the 1950s to enable related professions to share pre-qualifying studies in the belief that core values, knowledge and skills were transferable between them, and that each would gain strength by association with the others. Four 'collective movements' gathered momentum from the 1960s onwards for social work, nursing, the allied health professions and the complementary therapies. A fifth and very different movement cut across nursing and social work (more precisely social care), whilst a sixth comprised integrated programmes for paraprofessional grades across health, social care and beyond. Each set a precedent for shared qualifying studies between a broader spectrum of health and social care professions within which interprofessional education could take root.

The introduction of 'generic' studies for social work, and combined studies for branches of nursing with midwifery marked the transitional from separate qualifying education for each sub-profession or branch to integrated provision for a group of professions. That process began for social work in the 1950s and was adopted nationwide in the 1970s. It began in nursing and midwifery in the 1960s and was adopted nationwide in the 1980s. It started later for the allied health professions and most recently for the complementary therapies. Social work was the only grouping to achieve complete integration (although courses for probation officers were later withdrawn). Nursing continued to have its branches, with midwifery remaining a separate profession, but within a single regulatory, education and organisational structure. Both the allied health professions and the complementary therapies remained looser alliances but drawn closer through shared learning.

Each of these collective movements consumed time and energy at the expense of the wider exploration of scope for shared learning with professions beyond each immediate 'family'. That social work, nursing and the allied health professions have become engaged with other professions in more broad-based interprofessional

learning may be seen as a mark of maturity, as integration of each 'family' has reached the point when it is ready to look outwards. A parallel movement remained for some time between the allied health professions intent on finding common curricula as the basis for shared studies, but it has now been absorbed into the mainstream of qualifying interprofessional education. The complementary therapies may still need more time before they reach that stage, although discussions about their participation in IPE with the 'mainstream' health and social care professions were beginning at the time of writing.

Medicine, dentistry and pharmacy each enjoyed a relatively secure and established status with no need for comparable educational movements, although lack of them may be one reason for their relative isolation from subsequent IPE developments.

Social Work

The London School of Economics launched the first 'generic' course in social work (for child care and probation students in the first instance) in 1954 followed by others[11]. The perceived success of the early "generic" courses influenced the deliberations of the Seebohm Committee (1968). The Central Council for Education and Training in Social Work (CCETSW) became the vehicle to reinforce the 'generic movement', as it progressed fast to unify qualifying systems for the branches of social work and to introduce a single award - the CQSW (the Certificate of Qualification in Social Work).

CCETSW also promoted schemes under the joint management of local colleges and employers to provide interlocking sequences of study for a range of social care occupations including home help organisers, day and residential care managers, and specialist workers with disabled groups. Courses led to the Certificate in Social Service (CSS) were endorsed with occupationally related options. Multiprofessional in concept, the CSS ran for some 15 years, before being absorbed into the mainstream of qualifying studies in social work, demonstrating the power of the centripetal forces at work. Both the CQSW and the CSS were to be replaced by the Diploma in Social Work (DipSW) and, later, by the social work degree.

The 'generic movement' was essentially preoccupied with the integration of qualifying education for social work. References to learning with professions beyond the social work family are conspicuous by their absences in Younghusband's (1987) critiques of developments in social work education at that time and Hartshorn's (1982) equally authoritative review of the LSE generic course.

To conclude, however, that social work teachers lacked interest in interprofessional learning and collaboration would be less than the whole truth. Interest in relations between social workers and a wide spectrum of other professions was longstanding (Stevenson, 1968), including psychodynamic insights often neglected in the interprofessional literature (APSW, 1960) and evaluations of social work attachments to GP practices and health centres (Forman & Fairbairn, 1968; Goldberg & Neill, 1972; Clare & Corney, 1982). These coincided with short-lived interest in 'patch-based' practice (Bayley et al., 1989; Hadley et al, 1987) which brought individual social workers into closer proximity with their colleagues in other professions,

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[11] In Bristol, Edinburgh, Keele, Liverpool, Manchester, Nottingham, Southampton and elsewhere.

reflected in a rigorous analysis in the Barclay report (1982).

Respondents to my plea for help recalled numerous occasions when they had learned with other professions. Hilary Beale, for example, remembered learning law, human growth and development, with health visitors and community nurses at the University of Southampton as a child care student in 1971. Margaret Oates remembered how students in clinical psychology, psychiatry and psychiatric social work at the University of Edinburgh between 1968 and 1971 shared the same classrooms and the same 'pubs'. Both Hilary and Margaret testified, in their personal communications, to the positive and lasting impression that that learning had had on their subsequent work with other professions.

Margaret Yelloly (as she then was) remembered the enthusiasm surrounding short-lived provision of joint seminars between students in the schools of education and social work at the University of Leicester around 1968-70, but thought, on reflection, that commitment had been lacking. Seminars for staff on practice supervision had been more sustained and, in her view, more successful.

Developments in Leicester may have been encouraged by three conferences held in Keele where distinguished academics compared perspectives on undergraduate curricula and teaching for intending school teacher and social workers (Halmos, 1958a&b, 1960). Nowhere else, to my knowledge, have educational leaders for different professions made comparable sustained and systematic commitment to lay philosophical and theoretical foundations to underpin their students' interprofessional learning, albeit far removed from the realties of collaborative practice which their students would be entering.

That tasks seems to have been left to a follow up workshop in Leeds in 1962 [12] between some of the same participants where they applied thinking from the third conference to proposals for an 'interprofessional tripos' in response to the recurrent need for students to be more aware of the different roles for the professions that they were entering (APSW, 1962).

These developments warn against overstating social work's preoccupation with its inner search for a corporate identity. Commitment to IPE was strong, if spasmodic and sporadic, carrying forward well established collaboration with other professions, notably in child care, medical and psychiatric social work.

Nursing

Centripetal forces in nursing gained momentum following the creation of the United Kingdom Central Council for Nursing, Midwifery and Health Visiting (UKCC) and the four related National Boards. The Judge Report (1985) followed by the Project 2000 Report (United Kingdom Central Council, 1986) recommended a core curriculum for pre-registration studies to be followed by specialist studies for the separate branches or professions within nursing.

The proposition was, however, far from new. As far back as 1863 the Manchester and Salford Sanitary Association had written to the Medical Committee of the Manchester

[12] With another envisaged in Durham in 1963.

Royal Infirmary making the case for broader-based nurse education that would qualify students to practice in three fields: hospitals; private families; and visiting amongst the sick and the poor. But the Medical Committee thought that the plan was "too comprehensive to be undertaken by the Medical Officers of the Infirmary until a more simple system had been in operation and specially applied to nurses already doing duty in the hospital wards" (Brockbank, 1970).

It was to be almost a hundred years before a similar proposal was made by the Royal Manchester Children's Hospital in Pendlebury with Hope Hospital in Salford approved by the General Nursing Council for England and Wales in 1950, although the Medical Committee at the Manchester Royal Infirmary again declined to be involved (Golay, 1953). The course took its first students in 1952, who received experience during four years in both children and adult nursing. The curriculum included social services and public health, observing the work of health visitors in clinics and private homes plus site visits, amongst many others, to the sewage and waterworks, a dairy and a cinema - to see the ventilation plant not the film!

That course was the precursor for the long-running Diploma in Community Nursing course, established in 1959 between the University of Manchester and the Crumpsall School of Nursing accorded degree status in 1969. This was reportedly the first course in nursing where students shared lectures with others, for example, in obstetrics with medical students and social administration with students from the Faculty of Economics. During their field work the nursing students accompanied health visitors and the geriatrician to meet patients and able bodied people in their homes. In the University, they took advantage of their student status, joining societies and sports activities.

The course combined training in three distinct, but related, subjects: basic nursing; health visiting; and medico-social work leading to three qualifications; state registration in nursing, the health visitor certificate and a University diploma. It should be possible for diploma holders to enter any of these fields, according Professor Fraser Brockington (the instigator of the course who had a background in social and preventive medicine). That might seem strange, he said, to those who had grown accustomed to the rigid barriers which had been interposed between those jobs. Those barriers, however, needed to be broken down if the patient and the community were to be maintained in health by comprehensive health services. For Brockington, one of the great tasks at that time was to bridge the gulf that separated hospitals from the outside world, which could be helped by bringing training for hospital and home nursing together. Bridging the gap between health visiting and socio-medical work was no less important. Work in "medical care" had to be broken down into manageable units, but the inevitability of division of labour made it even more important that those working in these different fields should have a common understanding. Yet in recent years they had grown apart (Brockington et al., 1960).

The Manchester experiment was a major break through, anticipating more widespread recognition of the need for better understanding between professions across primary and secondary care, and health and social care, and for education that facilitated more flexible deployment of the workforce and the redrawing of professional boundaries. But it stopped short of developing IPE learning methods as they came to be understood. That was picked up much later in the 1980s in Suffolk when health

visitors, district nurses and occupational health nurses came together in a course leading to a Diploma in Higher Education in Professional Studies. It would be hard to find an example where intra-professional education better anticipated those addressed later in interprofessional education. Common foundation studies were provided in mixed groups. 'Joint working teams' presented seminars on matters of common concern. Most students nevertheless regarded the course as "learning the same knowledge alongside others", although almost a quarter as "learning interactively from other professions" (Gill and Ling, 1994).

The Allied Health Professions

Parallel arguments had gained ground for shared studies between the allied health professions (known then as the professions supplementary to medicine). The Oddie report (1970) had already recommended common studies for an aide or helper grade to work with any of those professions (Burt, 1973). Employers endorsed that in the McMillan Report (1973), which also recommended common studies at professional level, although that proved to be more controversial. Professional associations feared erosion of identity, although the NHS Management Board saw common studies as a means to establish flexibility by developing common competencies (Lucas, 1990). Schools for professions allied to medicine had nevertheless amalgamated in Cambridge, Derby, East Anglia, Hull, Edinburgh and elsewhere, and joint pre-qualifying studies had started in Cardiff, Derby (Forman et al., 1994) and Salford (Lucas, 1990; Lucas & Davidson, 1995). These linked generic and specialist studies, enabling two or more of the remedial professions to share common modules, while remaining separate for others. They also ensured a coherent sequence of studies for each which satisfied the expectations of both students and teachers, while meeting the requirements of validating bodies. These shared programmes were promoted and regulated by the Council for Professions Supplementary to Medicine (CPSM).

The Complementary Therapies

The fourth movement draws together some of the many complementary therapies (or CAMs – complementary and alternative medicines) to introduce firmer foundations in the biological sciences. As for nursing and the allied health professions, independent schools for particular therapies merged with universities so that the validation of courses and assessment for awards were subject to the rigour of higher education systems and criteria, and teachers encouraged to become 'research active'. Combined studies for the CAMs were on the largest scale in the School of Integrated Health at the University of Westminster, but separated from qualifying courses for the mainstream health and social care professions which that University did not offer. Studies for the CAMs were on a smaller scale in a number of other universities alongside those for other professions with possibilities for multiprofessional or interprofessional education.

Learning Difficulties

Moves towards joint training for workers in the field of mental handicap may at first seem like an aberration. Their genesis and motivation were quite different from the other four and their out-workings more fraught, but no less significant in breaking the mould of qualifying education and paving the way for broader-based developments later.

The Jay Committee (1979) recommended the substitution of a social model for the

medical model in mental handicap, deemed more appropriate as patients and staff relocated from hospital to community. Jay followed that argument through to its logical conclusion - the transfer of training for mental handicap nurses from nurse education to social care education. Responsibility should accordingly be transferred from the then General Nursing Councils (GNCs) for England and Wales, Scotland and Northern Ireland to the then Central Council for Education and Training in Social Work (CCETSW). Nurses, parents and pressure groups were vehemently opposed. Psychologists attacked social care for being too passive and, forming an alliance with mental handicap nurses, they advanced arguments for a new profession, to include `teachers` of mentally handicapped adults as well as specialist nurses, based upon an educational model. Neither nursing nor social work professional bodies, for whom mental handicap had always been marginal, took much interest in the argument that ensued, leaving the problem with the GNCs and CCETSW.

Faced with an impasse, Ministers rejected Jay's recommendation and called upon the GNCs and CCETSW to establish a joint working group in the expectation that it would come up with recommendations for "joint training". Obligingly, it did so. Recommendations were made for such training at pre-qualifying level between students preparing for the CSS[13] and for the specialised mental handicap nursing register (GNCs/CCETSW, 1982), and at the post qualifying stage (GNCs/CCETSW, 1983).

Only two of the recommended pre-qualifying courses got off the ground, one in north east London and the other in south east London (Brown, 1994). Students in each had to complete all requirements for the CSS, before some were allowed (subject to support from their employers) to opt for a further year's study to meet the remaining requirements for the nursing register. Few did so. Neither initiative survived major reforms in nurse and social work education. Two similar courses followed at Portsmouth (Evans and McCray, 1994) and South Bank universities, linking the new qualifying systems (Project 2000 for nursing and the Diploma in Social Work).

"Joint training" had entered turbulent waters, invoked, as some saw it at the time, as a political fix. Debate descended from the high ground of the relative merits of different models of care to an unseemly 'turf war'. Underlying arguments had more to do with remodelling the workforce than cultivating collaboration based on reciprocal respect between established professions. But what seemed to many of us who were involved at the time as an aberration can be seen, with hindsight, as a portent of arguments later for 'common learning' designed to create a more flexible workforce, with more permeable boundaries between professions, throughout health and social care.

Meanwhile, the Audit Commission (1986) had argued for common learning for a new community care profession. Core elements in Project 2000 for nursing (UKCC, 1986), said the Commission, might well be extended to all professions working in the community to create a basic grade "community care worker". This came to be seen by many professionals, according to Weinstein (1994), as a hidden agenda reinforced by subsequent calls for 'common learning'. Soon after, the University of Dundee was commissioned by the Scottish Office to develop distance learning programmes in

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[13] A broad-based social care qualification established in parallel with the Certificate of Qualification in Social Work (CQSW).

community care for both health and social care workers at certificate, diploma and masters level (Dundee, 1990 & 1991). The certificate programme recruited well and was adapted for use in parts of England.

Scottish and National Vocational Qualifications

Shared learning had, as noted above, been established at paraprofessional level for the allied health professions and arguments advanced for comparable developments for community care had been partially implemented in Scotland.

Scottish and National Vocational Qualifications (S/NVQs) had been introduced to develop a more rational and responsive overall system designed to generate the skilled workforce needed to further national economic recovery (de Ville, 1986). They were extended into fields such as health and social care where some thought that their reductionist and mechanistic emphases sat uncomfortably (Hevey, 1992; Kelly et al. 1990; Yelloly, 1992; Webb, 1992). Their introduction nevertheless proceeded quickly as a means to harmonise training for ancillary grades across health and social care with the support, or at least the acquiescence, of regulatory and professional bodies.

Suggestions that S/NVQs might gravitate upwards to the professional education level (Employment Department, 1995) set alarm bells ringing in health and social care (Barr, 1994b) and were not pursued. Had they been so, they would have prescribed for better or worse the framework within which "common learning" between the health and social care professions would have been promoted.

These six movements had nevertheless prepared the ground by the mid-1990s for the sweeping developments that were to follow.

Introducing IPE

Neither social work nor nursing described its collective movement as interprofessional, although the allied health professions were encouraged by the CPSM to regard theirs as such. Indeed, the CPSM developed the habit of referring to its own policies for IPE as if they were applicable also to professions beyond its jurisdiction. This generated some confusion.

IPE at the pre-qualifying stage may still have been generally regarded as a no-go area, but health and social care professions were learning together in ways that may well have contained elements of interprofessional learning, sewing seeds for its general introduction.

"Piecemeal endeavours" in shared undergraduate studies were being reported as early as the 1970s in Southampton, Liverpool, Newcastle, Manchester, Canterbury and Keele (Mortimer; 1979), although data were lacking to clarify whether these fell within the collective movements reported above or were primarily interprofessional. Subsequent initiatives (none of them listed by Mortimer) were, however, explicitly intra-professional or interprofessional.

In Salford, multiprofessional education was introduced into qualifying courses for occupational therapists, physiotherapists, radiographers and chiropodists (Lucas, 1990) based on common skills, methods and learning needs (NHS Training Management, 1986) and employing problem based learning (Hughes and Lucas,

1997). IPE was woven in, including learning about respective roles, multidisciplinary case studies and an open forum. Feedback confirmed that the course had informed participants about other professions' roles and responsibilities. Subsequent developments at degree level included teambuilding and the development of effective communication and co-operation between professions (Davidson & Lucas, 1995) although by then teachers reportedly had mixed feelings about such learning.

In Thamesmead, lunchtime meetings, half day seminars, joint home visits and a residential weekend were organised between 1976 and 1979 where students in general practice, nursing and social work on placement compared perspectives (Jacques, 1986). Barriers to collaboration were identified and ways explored to overcome them.

At the Middlesex Hospital in London medical, nursing and physiotherapy students were required to spend two and half weeks together in the geriatric department (Beynon et al., 1978; Hutt, 1980). Although the aim was multiprofessional, i.e. to enable students to understand the principles of geriatric medicine, two objectives were interprofessional:

- To assess the needs of patients and make medical, nursing and physiotherapy plans to meet them;
- To outline the role of other disciplines involved in the care of the elderly in hospital and the community.

In Edinburgh, teachers at Moray House College of Education were exercised about the negative stereotypes held towards each other by students of the three professions - community workers, primary schoolteachers and social workers - at the outset of their courses which they found to be reinforced by the end. Staff acknowledged their responsibility to do something about this. They called upon theories from social psychology – notably the contact hypothesis (Allport, 1954) - to devise ways to enable each profession to get to know the others personally and professionally during a series of workshops. These included exercises in self-disclosure, games, role-play and debates. A series of initiatives were piloted and evaluated (McMichael and Gilloran, 1984; McMichael et al. 1984a; McMichael et al. 1984b).

In Bristol, similar initiatives between doctors and nurses (Carpenter, 1995), and between doctors and social workers (Carpenter and Hewstone, 1996) also invoked the contact hypothesis. Participants learned as equals in pairs and small groups. The focus throughout was on differences as well as similarities between their professions, while respecting each other's identities.

Separate though the Edinburgh and Bristol initiatives were, they spearheaded the introduction of theoretically based and rigorously evaluated interprofessional elements into qualifying courses.

Piecing together the picture

Early in 1996 Ross and Southgate (2000) mapped 'shared learning' between medical and nursing students at the qualifying stage, drawing on their respective professional and academic networks in nursing and medicine in preparation for two workshops under the auspices of CAIPE to:

- Clarify outcomes for each professional group to achieve through shared learning;

- Consider models of innovation and good practice in shared learning;
- Discuss methods of implementation and strategies to overcome difficulties;
- Discuss and support future developments through a network.

Southgate wrote to 25 medical schools to enquire about activities or interest in shared learning between medical and nursing students. Ross telephoned 37 departments of nursing and midwifery associated institutionally with, or geographically near to, a medical school to enquire whether they were involved in such shared learning and, if so, who was leading it. Together, they found only three examples, two lapsed "pilots", "advanced plans" in four institutions and "plans" in a further eleven.

Findings informed the design and content of the workshops in 1996 and 1997. Each workshop mainly comprised pairs of medical and nursing educators from the same or nearby institutions with lead roles for shared learning. Twenty-three universities were represented.

Discussion generated consensus regarding the objectives for shared learning to:

- Improve patient care;
- Improve understanding of professional roles;
- Foster trust and enhance interprofessional working relationships;
- Maximise use of resources;
- Improve communication.

There was also consensus regarding the following topics for such learning:

- Epidemiology/population health/health promotion;
- Health care ethics;
- Critical appraisal skills;
- Clinical skills;
- Decision making and care planning.

Challenges included:

- Organisational commitment to strategic leadership;
- Moving from pilots to mainstream activity;
- Moving from options to core curricular components;
- Moving from softer areas to high technology medicine and surgery.

Among the curricular challenges identified were balancing student numbers and defining learning outcomes appropriate to students with varying academic attainment.

Lynn Smith (1998) canvassed organisational members of CAIPE and training consortia towards the end of 1997 in response to a request from the Health Education Authority to identify pre-qualifying IPE initiatives deemed to be "good" or "effective", with particular reference to health promotion. Her enquiries (supplemented by her knowledge of the field as Director of CAIPE) generated 106 responses, which enabled her to identify 45 qualifying programmes including more than one profession in the student group. Of these, five were at an advanced stage of preparation, but had not yet taken their first intakes.

Of the 45, 30 gave knowledge and understanding of collaboration as their prime

objective and six gave enhanced patient health care. Other objectives mentioned included: team working; skill transfer; creating multi-skilled workers; sharing evidence and practice; and optimising the use of resources.

Students from the 45 programmes were preparing to enter the following professions (with the number of sites given in brackets): medicine (16); nursing (30); social work (16); allied health professions (27); management (8); dentistry (3); education (4); psychology (5); health sciences (7); and others (11).

The number of students varied widely. Sixteen programmes catered for between seven and 30 students, a further seven for groups of between 100 and 500.

Smith selected six sites as case studies[14]. Further information was elicited by telephone from another 15 universities regarding similar initiatives[15]. Other higher education institutions were also identified that provided combined studies between professions, but not contacted.[16] She also obtained information from NHS Trusts and related organisations.[17] None of these programmes made explicit reference to health promotion, which lay at the heart of the original request to CAIPE from the HEA.

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[14] Bournemouth University: BSc Health Sciences for nursing, social work and PAM students; University of Southampton: interprofessional workshop on palliative care medical and nursing students, and on the care of the elderly for medicine, nursing, occupational therapy, physiotherapy, podiatry and social work; University of North London: BSc Applied Social Sciences (social values module) for social work and health professions' students; De Montford University, Leicester: BA Hons. Health Studies (research methods module) for administration, audit, education, nursery nursing and nursing students; University College, Suffolk: diploma in learning disabilities for social work and nursing students; Cheltenham & Gloucester College of Higher Education: communications module for nursing and social work students.

[15] Anglia Polytechnic - operating department practice; Bradford: shared studies (unspecified) for physiotherapists and radiographers; Brighton (Eastbourne) - shared modules (unspecified) for podiatry, physiotherapy, occupational therapy and nursing; City - one-day course in clinical skills for medical students and recently qualified nurses; Coventry - shared modules in welfare, health and inequalities for health sciences, social work, social welfare and PAM students; Liverpool - case studies and shared modules in physiology, research and statistics for seven professions; King's College London - interactive groups between medical and nursing students to improve understanding; St George's Medical School, London - learning in pairs for medical and nursing students; Nottingham - case based learning between nursing and medical students; Oxford Brookes - shared modules on research, ethics and social issues; Sheffield Hallam - shared modules (unspecified) for nursing, occupational therapy and social work students; South Bank - learning disabilities for nursing and social work; West of England - core skills, including research and understanding social context for health sciences for nursing, PAM, social work and sociology students; Westminster - healthcare management course for health sciences, management, nursing and PAM students; York - shared clinical supervision for education, nursing, management and PAM students..

[16] Derby, John Moores (Liverpool), Reading, Leeds with Leeds Metropolitan universities, plus King Alfred's College (Winchester).

[17] Exeter Primary Care Audit Group - audit courses including aims to improve communications and teamwork for undergraduate ad pre-registration students; City and Hackney NHS Trust - key worker course, focusing on mental health, for management, nursing, social policy, social work, PAM and psychology students; South Manchester University Trust - problem based learning to develop teamwork for pharmacy and medical students; Hull and Holderness Trust- research awareness course for art therapy, nursing, PAM, management and health science students.

Smith's report was not released. Nor (as best I can recall as a member of her Steering Group) was permission obtained to publish findings from her interviews with students and staff and her observation of teaching. I have therefore restricted this summary to the facts. But the determination with which she tracked down every lead provides the best possible snapshot, short of conducting an exhaustive and costly survey for which resources were not available. Many of the universities and colleges also volunteered information about work in hand to develop additional IPE initiatives, conveying the sense of momentum gathering pace by the end of the thirty years under review.

On Reflection

Antecedents for IPE at the qualifying stage were complex, confusing and sometimes contested, giving credence to protestations that it was better left until the post-qualifying stage. The mould was nevertheless broken and the ground prepared for subsequent developments. Lift-off was apparent by the end of the years under review, ahead of government policies that were to follow for the universal adoption of pre-registration IPE for all the health and social care professions.

Chapter 7

Reviews and Surveys

Chapters 5 and 6 included summaries of findings from reviews of IPE at the pre-qualifying and qualifying stage respectively. This chapter summarises those from more broadly based reviews and surveys of IPE for health and social care regardless of stage or setting, conducted or commissioned by government departments, the ENB, CAIPE and the Committee of Vice Chancellors. All have methodological limitations. None can be singled out as more authoritative than the others, but together they provide the best available picture of IPE at much the same time.

Reviews for Government

The Department of Health commissioned the Scottish Council for Research in Education, with the universities of Dundee and East Anglia, to ascertain the extent of "multidisciplinary education" throughout the UK. The review by Pirrie et al. (1997, 1998 a&b) employed qualitative methods ill-suited to meet the Department's expectation, but illuminating. They interviewed organisers and students from ten interprofessional courses and practitioners in two contrasting settings. Neither teachers nor students universally welcomed moves to break down barriers between professional education programmes, many finding it difficult to hold the tension between retaining unique areas of knowledge and skill and sharing overlapping areas.

Nevertheless many of the course organisers interviewed saw a direct correlation between a satisfactory experience of learning with other professions and working together effectively in teams. Anecdotal evidence from the study suggested that IPE enhanced personal and professional confidence, promoted mutual understanding between professions, facilitated intra- and interprofessional communication, and encouraged reflective practice. Respondents thought, on balance, that such education had more impact at the post-registration than the pre-registration stage. Logistical factors inhibited "multidisciplinary" courses, especially at the pre-registration stage. Initiatives were often ad hoc. An "over-arching strategic vision" was critical to sustain development in the long-term.

The Welsh Office commissioned CAIPE and City University (Freeth et al., 1998; Tope, 1998) to identify the way forward for IPE in Wales, and to review current IPE activity and an analysis of factors that promoted or impeded effectiveness. The review comprised four stages: the identification of plans for IPE in the Principality; an analysis of the perceived effectiveness of interprofessional courses; issues affecting students and staff; and testing options for future development. Methods included questionnaires to NHS Trusts, social services departments and CAIPE members to identify interprofessional courses. Seven case studies were based upon analyses of records, interviews and focus groups. Courses included were anonymous by prior agreement. The reports called for longitudinal research to evaluate outcomes.

A Review for the ENB

Miller et al. (1999 & 2001) conducted a review for the ENB of nurses' collaboration in practice and implications for IPE, based on case studies, a survey of educational institutions and interviews with NHS Trusts managers. They found that very little multiprofessional education in universities was addressing interprofessional issues. Common curricula had been established to reduce duplication, not to utilise and value professional differences. They stressed the importance of IPE during pre-registration courses to prepare students for teamwork.

The CAIPE Surveys

CAIPE commissioned the Institute of Community Studies to conduct a survey of IPE throughout Great Britain (i.e. the UK excluding Northern Ireland). The researchers (Shakespeare et al., 1989) found 695 examples of IPE. Just 2% were at undergraduate level, 18% during post qualifying training and 83% during continuing professional development. Most were brief. Over half lasted less than a day with over a quarter between two and four days. Very few were longer. Topics covered included child abuse, teamwork, AIDS, mental health and learning disabilities.

CAIPE conducted the second survey itself during 1994, covering the whole of the UK (Barr and Waterton, 1996). It was designed to replicate the first, but that was frustrated by a markedly lower response rate. The survey nevertheless found 455 examples of IPE. Three quarters of these were at the post-experience stage, most lasting between two to five days, with a third lasting less than two days. Topics covered were life stages from maternity to palliative care, chronic illnesses, collaboration, community care, counselling, disabilities, education and training, ethics, management and mental health. Health Authorities or Trusts instigated most of them in association jointly with either colleges or universities or local authorities. The number of participants per initiative ranged from eight to fifty. Community nursing groups made up the largest category followed by medicine, professions allied to medicine and social work, in that order. Learning was assessed in over half of the 200 initiatives lasting more than two days. Satisfactory completion often carried credit towards certificates, diplomas and degrees.

Methodology for both these surveys was constrained by resource availability. They solicited information from respondents thought likely to know of IPE initiatives. Neither survey had enough resources to canvass all relevant universities and training agencies. Each painted an illuminating picture, but was unable to estimate the overall incidence of IPE.

A University Survey

The Committee of Vice Chancellors and Principals (now Universities UK) (CVCP, 1997) found that 54 of 77 higher education institutions with courses for health professions offered some "shared learning", of which 13 were at undergraduate level and 30 at both undergraduate and postgraduate level. Twenty-four institutions had plans to expand shared learning in response to the expectations of NHS purchasers, of which 20 said that they were influenced by the need to prepare students for teamwork. Nine were planning modules in interprofessional skills, including communications. Twenty-five regarded shared learning as more cost effective than uniprofessional learning.

These data suggest a higher incidence of IPE at the qualifying stage than found three years previously by the second CAIPE survey, but differences in methodology preclude strict comparison, while the term "shared learning" is more inclusive than "interprofessional education".

On Reflection

Reviewing and surveying IPE has always been difficult: it has become more so. Many IPE initiatives are ephemeral, soon rendering findings out of date. Some work based initiatives are discrete enough to identify and quantify, but many are woven into the fabric of everyday working life and go unrecognised as IPE. Similarly, some university-based initiatives are free standing and can be counted, but many as reported in chapters 5 and 6, are woven into the fabric of uniprofessional and multiprofessional education. The pace, scale and complexity of recent developments signals clearly that any future reviews and surveys of IPE would need to command much greater resources if they were to identify the large number of initiatives 'out there' and distinguish between interprofessional from multiprofessional and uni-professional components. The return on that investment is questionable. Resources might be better directed towards selective qualitative reviews and the evaluation of particular initiatives.

Chapter 8

Then and Now

Foundations had been laid by 1997 for the implementation of policies that were to follow for career-long IPE for all health and social care professions. This concluding chapter summarises the progress made and anticipates work soon to be put in train to bring the picture up-to-date.

Nineteen ninety seven was a watershed in the history of IPE in the UK as an incoming government installed it as a central plank in its workforce and training strategies to modernise health and social care. If that seemed like a bridge too far to some amongst an older generation of interprofessional exponents (who deserve credit for much of progress recorded in these pages) a younger generation embraced the new agenda with alacrity, although questions were to persist about the compatibility of different agenda.

Foundations for many, but not all, of the reforms that were to follow had already been laid. IPE was no longer exclusively a bottom up, grass roots movement. It had responded effectively to successive steers from previous governments, their agents and independent central bodies.

Nationwide IPE programmes had been launched successfully. Some had been sustained over a number of years, although most remained local and ephemeral, over-dependent upon their champions and 'funny money', and essentially insecure on the margins of professional education where they were vulnerable to budgetary cuts. Leadership was heavily reliant on the young-old, cushioned by their pensions if and when fees ran dry, or willing to support the interprofessional cause as volunteers. Nowhere was this more apparent than in CAIPE although the all too short period during which it enjoyed secure core funding enabling it to appoint a full-time Director demonstrated beyond doubt what could be achieved.

Many UK initiatives were still isolated and insular. IPE was compartmentalised by location at work or in college, by stage in professional maturation and by field of practice. CAIPE, alone at that time, tried to embrace these separate elements as a coherent whole, to construct a single edifice informed and guided by core interprofessional principles and generate opportunities to exchange experience.

Work-based and post-qualifying IPE initiatives still far outnumbered pre-qualifying. Enough examples of the latter had been launched, however, to provide a foundation upon which to build in later years although their aims, form and content differed markedly. At the same, time, IPE in universities and colleges had become embedded in uniprofessional and multiprofessional education. This created opportunities, but also left IPE exposed and vulnerable to the vicissitudes of professional education.

Opportunities were developing to exchange experience within the UK and increasingly with other countries. The latter received a fillip when the first major

international interprofessional conference was held in London in 1997, followed by steps to extend the scope of the Journal of Interprofessional Care worldwide.

IPE had come by then to be seen as a field of education for which teachers and 'facilitators', albeit building on their experience as adult educators, needed additional preparation. Models for such preparation had been tried and tested over a sustained period, for different fields of practice in different parts of the UK.

IPE had become better documented and more accessible through the professional and interprofessional journals and bulletins. Descriptions of IPE initiatives had become more widely available, interlaced with a growing number of evaluations. Systematic reviews had yet to arrive, but attempts had been made to collate IPE evaluations. If the literature remained uneven, I venture to suggest as an editor that it was improving.

I have already started work to record in similar vein developments in IPE in the UK from 1997 to 2007, now that many of the sources are to hand, encouraged once again by the Higher Education Academy: Health Sciences and Practice Subject Centre and by promises of support from a new generation of colleagues. More than an update, 'part two' will set IPE in the context of government policy for the modernisation of the health and social care services, workforce and educational systems, taking into account major strides during the past decade towards securing the value, theoretical and evidence bases for interprofessional teaching and learning. Parts one and two together will inform a critical analysis of the 'state of the art' of IPE in the UK from historical and contemporary perspectives.

On Reflection

Each succeeding generation of interprofessional exponents has been driven by the conviction that they were working at the cutting edge of pioneering endeavour. Each - none more so than today's - has indeed faced new challenges as IPE has extended into ever-widening fields for ever more professions, addressed additional objectives, extended its repertoire of learning methods, secured its theoretical foundations and come under increasingly critical scrutiny. Let that be the spur for the magnitude of the task that remains even though the record reveals that much the same challenges had constantly been revisited in time and place.

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Appendix A

Signposts and Milestones

1966 Kuenssberg convenes first reported interprofessional workshop.

1969 Seebohm report recommends generic education for social work.

1970 Oddie report recommends joint courses for ancillary grades to the allied health professions.

1972 Colwell report recommends joint training for child protection.

1973 MacMillan report recommends joint studies for the allied health professions.

1979 Nottingham conference reviews progress in promoting IPE.

1982 GNCs/CCETSW Working Party recommends joint qualifying training for mental handicap nursing and social care.

1983 GNCs/CCETSW Working Party recommends joint post-qualifying training for mental handicap nursing and social care.

1986 UKCC launches Project 2000.

1986 Audit Commission calls for common learning for a new community care profession.

1986 Exeter University launches its multiprofessional masters' programme.

1987 CAIPE Founded.

1987 Interact founded in Scotland.

1988 Acheson report recommends schools of public health for MPE.

1989 First CAIPE survey of IPE published.

1990 South Bank Polytechnic launches the first interprofessional masters' programme.

1995 Second CAIPE survey of IPE published.

1996 National Council for Hospice and Palliative Care recommends MPE.

1997 CVCP survey of IPE published.

1997 SCOPME Working Party published.

1997 Sainsbury Report recommends common studies for mental health professions.

1997 The UK hosts first international 'All Together Better Health' Conference

Appendix B

CAIPE and its Contribution

Proposals to establish a nation-wide centre to promote and develop interprofessional education were generated following a conference held in Enfield, North London, in 1983 organised by a GP (Michael Carmi), a nurse (Valerie Packer) and a social work teacher (Ann Loxley). Together, they had been jointly running interprofessional short courses during the previous three years for GPs, nurses and social workers (Horder, 2003)[18].

Dr John Horder, who had recently retired as a GP and completed his term of office as President of the Royal College of General Practitioners, agreed to take a lead role. He became the first chairman of the Centre for the Advancement of Interprofessional Education in Primary Health and Community Care (CAIPE). A steering group was convened, which met at the King's Fund College from 1984 to 1987. It organised three conferences which helped to establish a vision, first, that health and social care required a greater degree of collaboration from professionals than had been evident hitherto and, second, that effective collaboration would be enhanced by IPE.

CAIPE was to be neutral between professions, independent of government and regional in structure with a national co-ordinating Council on which each region would be represented. The need for funds was recognised from the outset to establish and maintain a central office with paid staff to carry out executive work on behalf of the Council.

Its aims were to:

- Foster and improve collaboration in the interests of effective services for patients and clients;
- Promote research and development in interprofessional education for practice in primary health and social care.

Inter alia, it would:

- Co-ordinate IPE activities;
- Facilitate exchange of information;
- Promote research;
- Develop opportunities for IPE;
- Strengthen the interprofessional perspectives of the training bodies of individual professions.

CAIPE held its inaugural Council meeting in 1987, with 28 members present drawn from medicine, nursing, social work and education. The meeting was chaired by Lord

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[18] This chapter calls extensively on the recollections of Dr John Horder CBE during his years and Chairman and President of CAIPE and subsequently.

(Michael) Young and addressed amongst others by Julia Cumberlege (later Baroness Cumberlege and a Health Minister). Interprofessional collaboration, she observed, was marked by rhetoric and well-worn cliches, but few primary care teams in her experience were working really well. Patients should be impatient in their demands for better service. Interprofessional education, she said, had the potential to "strengthen the very essence of care" (Leete, 1990).

The conference received the report of a survey commissioned by CAIPE from the Institute of Community Studies reporting IPE initiatives throughout Great Britain (i.e. excluding Northern Ireland) (Shakespeare et al., 1989). CAIPE conducted a follow up survey itself during 1994 covering the whole of the UK (Barr & Waterton, 1996) (see Chapter 6). It had by then also commissioned the University of Nottingham to interview opinion leaders in IPE throughout the UK (Barr, 1994), to identify and record examples of evaluated IPE (Barr & Shaw, 1995) and conduct a local review (Shaw, 1995).

The first CAIPE Bulletin appeared in January 1990, by which time the Centre had obtained £20,000 from the Department of Health and a further £20,000 from the King's Fund, with a view to setting up an office.

The first office was located in the London School of Economics in 1991. Soon after, Dr Patricia Owens, with a background in nursing, social work and the social sciences, took up post as the first Director (part-time). She organised a series of successful conferences, one in the School, two at Cumberland Lodge in Windsor Great Park, one at Magdalene College, Cambridge, and another in London at the King's Fund jointly with the Marylebone Centre Trust and the Open University. Speakers at these conferences included Sir Roy Griffiths, then Deputy Chairman of the NHS Executive, and Dr Donald Schon from the United States, whose writing about reflective practice was attracting much interest in UK interprofessional circles. After two years the need for CAIPE to contribute financially to the School could not be met and Dr Owens resigned as Director in 1994.

CAIPE had become a Charitable Trust in 1992 with Dr John Horder (the Chairman) and Baroness Cumberlege and Robert Maxwell of the King's Fund amongst the trustees who carried financial responsibility for the running of the Centre. The Council became an advisory body meeting less frequently, but appointed a small executive committee that met almost every month. These arrangements continued until 1997, when CAIPE became a company limited by guarantee whilst remaining a registered charity.

CAIPE relocated in 1994 to Open University premises in London's Gray's Inn Road. Lonica Vanclay was appointed as Director in March of that year. Her background was in social work, having recently practised with children from homeless families. For the first time CAIPE had a full-time Director, thanks to substantial funding by the Department of Health amounting to £36,000 in the first year, £24,000 in the second and £12,00 in the third, declining year by year on the assumption that it would gradually become self-supporting.

Free for a time from pressures to raise funds, Lonica Vanclay did much to raise CAIPE's profile, to prepare and publish regular Bulletins packed with information

about interprofessional policy, practice and education, and to launch national and regional groups. She also convened national seminars. One was about the evaluation of IPE, which complemented her work with Professor Charles Engel on audit and evaluation (Engel & Vanclay, 1997). Others were about pre-qualifying IPE, which was attracting increasing interest.

Sir Michael Drury, who had succeeded Dr John Horder as Chairman in 1994, concentrated his energies on mobilising support for CAIPE, including funds, from the larger professional organisations in exchange for promises of representation on the Council, but with limited success. Sir Michael and Lonica Vanclay both resigned in 1997 to be succeeded by Professor Ian Cameron as Chairman and Lynn Smith as Director.

By the end of its first ten years and despite fluctuating financial fortunes, CAIPE had become the focal point for IPE in the UK and beyond and a source of expertise on which to call as IPE gained momentum.

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The Author

Hugh Barr is the President of the UK Centre for the Advancement of Interprofessional Education (CAIPE), Joint Editor-in-Chief of the Journal of Interprofessional Care for Informa, Editor of the 'Promoting Partnership for Health' series for Wiley Blackwell, a Board Member of the International Association for Interprofessional Education and Collaborative Practice (InterEd) and a member of the WHO study group on IPE and collaborative practice.

His academic positions are Emeritus Professor of Interprofessional Education and Honorary Fellow at the University of Westminster with visiting chairs in the same field at King's College London, Kingston University with St. George's University of London, and the University of Greenwich. He was awarded an Honorary Doctorate by the University of Southampton in 2006 for his seminal role in promoting interprofessional education in the UK and internationally.

This paper also calls upon his prior experience as an Assistant Director of the then Central Council for Education and Training in Social Work (CCETSW) and as Special Professor in Interprofessional Studies at the University of Nottingham.

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Unpacking Interprofessional Education

Chapter 19

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Interprofessional collaboration
From policy to practice in health and social care

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Chapter 19

Unpacking interprofessional education

Hugh Barr

SUMMARY

Professions work better together when they learn together thereby improving the quality of care for service users. That is the proposition, a proposition as seductive as it is simple. The reality is more complex. Interprofessional education can have a direct and positive impact on the quality of care, but its benefits can also be diffuse and indirect defying easy evaluation. It takes many forms with many objectives, mostly interim, that may, under favourable conditions, contribute towards better care.

Much has been learned about different types of interprofessional education and their outcomes during the 30 years since it took root (Barr 1994, 2002; Barr et al 1999; Freeth et al 2002). Much has also been demanded which, depending on your point of view, complements or competes with the original proposition.

This chapter unpacks interprofessional education, selecting examples, each with a different objective and making a different contribution.

THE WORLD HEALTH ORGANIZATION

A seminal report from a World Health Organization workshop advocated shared learning to complement profession specific programmes. The report stated that students from different health professions should learn together during certain periods of their education to acquire the skills necessary for solving the priority health problems of individuals and communities known to be particularly amenable to teamwork. Emphasis should be put on learning how to interact with one another, community orientation to ensure relevance to the health needs of the people and team competence (WHO 1988).

Deliberations in Geneva were informed by those in Copenhagen where delegates at a previous WHO workshop had argued that students from health professions with complementary roles in teams should share learning

to discover the value of working together as they defined and solved problems within a common frame of reference. Delegates argued that such learning should employ participatory learning methods to modify reciprocal attitudes, foster team spirit, identify and value respective roles, while effecting change in both practice and the professions. This approach would support the development of integrated health care, based on common values, knowledge and skills (d'Ivernois and Vodoratski 1988).

These reports set seven expectations for interprofessional education:

- To modify reciprocal attitudes
- To establish common values, knowledge and skills
- To build teams
- To solve problems
- To respond to community needs
- To change practice
- To change the professions

Each of the following examples focuses on one of these expectations.

Modifying reciprocal attitudes

Teachers at Moray House in Edinburgh found that students entering community work, social work and primary school teaching were more prejudiced by the end of their courses than at the beginning. The college tried to modify those attitudes by helping students to bypass the need for stereotyping as the means by which each group defined the others. More contact, providing opportunities to identify similar attitudes, would, teachers believed, lead to mutual approval. To that end, three shared learning programmes were put to the test, each with different students.

The first offered placements to student teachers in community or social work settings, and to student community and social workers in schools. This programme was not evaluated. The second comprised a common course in social psychology organised around small and large groups. Workshops created opportunities for interaction. Each required the students to complete a questionnaire, repertory grid or rating scale to expose their thoughts to each other. They discussed ethical issues, competed in games and engaged in role play. Comparing before and after responses to questionnaires found that student teachers became more favourably disposed to the student community and social workers, but that this was not reciprocated. The third programme also comprised a series of workshops, including tutorial groups with between two and

> four students from each profession. Groups discussed a case study and videos about communication problems and the management of conflict. Members also took part in an exercise on work priorities and a do-it-yourself collaborative project. Again, student teachers changed most, showing greater awareness of how social workers could help them in their work, although this did not extend to community workers. For their part, student community and social workers remained critical of primary education, but became more alive to some of the teachers' frustrations.
>
> (McMichael and Gilloran 1984; Barr and Shaw 1995)

Other early initiatives in interprofessional education also focused on modifying reciprocal attitudes and perceptions (Hasler and Klinger 1976: Jones 1986; Carpenter 1995a, 1995b; Carpenter and Hewstone 1996) in the belief that overcoming ignorance, countering prejudice and correcting negative stereotypes would overcome resistance to collaboration.

Some, like Moray House, invoked the 'contact hypothesis' (Tajfel 1981), which holds, in its simplest form, that contact enhances mutual respect and understanding. This hypothesis was applied in the USA to test whether contact between members of different ethnic groups improved race relations. Findings were disappointing. Familiarity alone, it seemed, did not necessarily lead to liking (Zajonc 1968). Much depended on the quality of the interaction. Even then, other factors may negate positive influence (Berkowitz *1980*).

The implication for interprofessional education is clear. The learning needs, according to Hewstone and Brown (1986), to create opportunities for rewarding interaction between students in their respective professional roles with equality of status, positive expectations and a cooperative atmosphere, if mutual understanding is to result.

The risk remains that exposing one group to another may serve only to confirm prejudices and stereotypes. Attitudes and behaviour unacceptable to others, deficits in knowledge and skill, weaknesses in professional codes and disciplinary process, all or any of these may be exposed with implications for the governance of the professions, their regulation and education, which students and teachers can do little or nothing to resolve.

Nor can there be any certainty that removal of prejudices and negative stereotypes, if and when achieved, will unlock the door to better collaboration. Much depends on whether the working climate is conducive and whether the student has been equipped with the necessary knowledge and skills.

Establishing common values, knowledge and skills

The University of Birmingham launched a part-time mental health programme in 1997 open to community psychiatric nurses, occupational therapists, psychologists, psychiatrists, social workers and others. Students are encouraged to come in pairs or small teams from health and social service districts in the region. The programme leads to a postgraduate certificate or diploma after one year, and to a master's degree following a further year of supervised research.

The aim is to give practitioners from all these professions a common skill, knowledge and value base. The curriculum includes modules on the philosophy, policy, practice and ethical and legal framework for community care, training in psychosocial interventions and interagency working. The focus is on severe and enduring mental health problems with an emphasis on user participation. Values taught include anti-racist and anti-oppressive practice, user-centred decision-making, social inclusion and support for families and peers.

Service users have taken part in the appointment of staff, including the programme director, curriculum development, teaching and participation as students.

Early findings from the evaluation focus on the impact of the programme on attitudes to community care for people with mental health problems and professional stereotypes (the latter being the more interesting in this context).

Students in the first two cohorts identified strongly with their own professions, although less so over time. But they identified more strongly with their teams than with their professions. Reciprocal perceptions were revealing. Psychiatrists and psychologists received significantly higher scores from other groups for academic rigour and leadership skills, and social workers for interpersonal skills. Community psychiatric nurses (CPNs) and occupational therapists (OTs) were rated significantly lower for leadership and academic rigour. CPNs, however, scored relatively high on interpersonal and practical skills and OTs highest on practical skills.

No significant changes in attitude were noted during the programme. from which the researchers concluded that the programme had had no effect on professional stereotypes. They offered two explanations. Either stereotypes were reinforced in day-to-day contact with colleagues in the workplace, or conditions necessary for disconfirmation of stereotypes were not sufficiently present in the programme. Other findings add credence to the latter. The atmosphere had indeed been conducive to co-operative rather than competitive learning, and students

had worked together as equals, but opportunities had been lacking to explore differences as well as similarities between professions. Conditions necessary for the contact hypothesis to take effect had not therefore been fully met.

(Barnes et al 2000a, 2000b)

These findings highlight the risk that programmes designed to reinforce common values, knowledge and skills may inadvertently underplay differences, limiting opportunities for interactive learning and missing opportunities to effect attitudinal change. The programme was postgraduate, but the findings have major implications for undergraduate studies in the UK where much emphasis is currently put on common rather than comparative curricula (Department of Health 2000).

Common learning introduces common concepts employing a common language, which can lay foundations for collaborative practice, yet fail to obviate the barriers. Value is added, according to leading exponents of interprofessional education, when learning is also comparative and interactive (Barr 1994).

Team-building

The University of British Columbia piloted a two-day interprofessional team experience for senior students from nine different undergraduate health care and human service programmes. Content included the purpose of interprofessional teams, group dynamics, team communications, multiple professional paradigms, and team management. Methods were interactive, emphasising reflection upon insights gained from the learning experience rather than the acquisition of programmed knowledge and focusing upon professional roles and expertise, communication, conflict resolution and team issues.

The first of two exercises was a competition between four teams of mixed professions to build a model from Lego blocks. Lest that seem too easy, the model that they had to copy was abstract and each team given the necessary parts, but in different colours from the original. The object was to provide students with a common experience base in applying teamwork concepts and tools. Each team member was assigned a different role. 'Project managers' were given different instructions (unbeknown to each other), based upon different organisational design philosophies. This enabled lessons to be learned during the debriefing about the different approaches taken from different theoretical perspectives. The learning-based team outperformed the traditional, value and process-based teams. Flexibility proved to be the key to success.

The second method developed team responses to needs identified in two half-page case studies chosen to create opportunities to demonstrate the effectiveness of interprofessional team working. Members were assigned to roles and expected to assess team performance and clarify delegation through 'responsibility charting'. Teams were more comfortable, and exchange of ideas more efficient, during the second case study.

The workshops were oversubscribed, helped no doubt by the decision to pay $100 to students who participated on both Saturdays (chosen to avoid time tabling problems), but feedback suggested that many would have attended anyway. Recruiting teachers (with no extra pay) was more difficult. Students were unanimous in their praise for the workshops and the relevance of learning to practice, although all made suggestions for improvement. Follow up six months later confirmed that students had found the workshops helpful, notably in demonstrating the value of interprofessional collaboration and understanding the roles of other professions, although some had had a hard time implementing what they had learned.

(Gilbert et al 2000)

Few examples of team-building *per se* can be found in the interprofessional education literature for health and social care. Some question whether skills training is necessary for teamworking, believing that once autonomy, equity and mutual respect is established between professions, a team will develop its own way of working and learning effectively together (SCOPME 1999). That view seems to be reflected in a preference for team development rather than team-building, where teamwork is reinforced as members engage in activities designed to improve services or resolve problems (Barr 1994).

Undergraduate education for the health professions has been criticised in the UK for failing to prepare students for teamwork (Miller et al 1999). Rectifying that omission is a high priority, but collaboration cannot be wholly contained within teamwork. It also includes co-working and networking beyond the bounds of a team, however defined, as well as collaboration within and between organisations and with service users, their carers and communities (Secretary of State for Health 2000). Teamwork may have once been a sufficient organisational framework for interprofessional education, but no longer.

Solving problems

Undergraduate programmes in physiotherapy, prosethics, orthotics and diagnostic radiography at Salford University incorporated three interprofessional modules. One of these entitled 'People in Society' had three themes: social structure, health and the NHS. Problems were presented for students to discuss, for example:

'The population's mean age is increasing and changing the pattern of health and illness in the community. Explain the phenomenon in terms of healthcare delivery.'

Each assignment followed the seven stages of problem-based learning:

- clarifying terms and concepts
- defining the problem
- analysing the problem
- making a systematic inventory of the explanations that emerge from the analysis
- formulating targets for learning objectives
- acquiring knowledge in relation to the learning need
- synthesising and checking the newly acquired information and knowledge

The students identified areas in which they lacked information and understanding, and decided how these deficits could best be made good. They then engaged in a variety of independent learning activities, which helped them to explore the constructs, issues, theories and mechanisms involved. The results were brought back to the group for further discussion to elaborate the problem and its implications.

Ninety percent of students agreed that interprofessional learning objectives had been met during the problem-based learning. These covered: interaction, co-operation, sharing of knowledge, appreciation of values, effective communication, listening to others, reflection and respect for others' contributions.

(Hughes and Lucas 1997)

Problem-based learning (Barrows and Tamblin 1980) is perhaps the most widely used interprofessional learning method, drawing on its worldwide application in community-based medical education, but it is one of many (Barr 1996). Other learning methods also involve participants in joint investigation to effect change, such as collaborative enquiry developed by Reason

(1988, 1994); as applied to interprofessional learning by Glennie and Cosier (1994); and continuous quality improvements (see below).

Practice-based learning is held to be essential (Bartholomew et al 1996) and can take many forms: observational study (Likierman 1997), shadowing (Reeves 2000), cross-professional placements (Andersŏn et al 1992) and experience on training wards (Freeth and Reeves 2002: 116–38; Reeves and Freeth 2002).

There is much that teachers can do in the classroom to complement practice-based learning by stimulating exchange between the professions (debates and case studies) and simulating collaboration in practice through role play and games. Skills labs simulate practice (Nicol and de Saintonge 2002). So, in a very different way, do experiential groups, like those during the 'Pride and Prejudice' workshop organised by the University of Westminster in conjunction with the Tavistock Institute that approximate to interprofessional, interagency and intersector work settings (University of Westminster 2001).

Opting for just one method is needlessly restrictive. Imaginative teachers ring the changes to enliven learning and to respond to different needs in different ways. Methods can also be combined, as the next example illustrates.

Responding to communities

Groups of pre-registration medical, nursing and social work students in Leicester interviewed patients in deprived neighbourhoods, and representatives of three key agencies involved in their care. The aims were to enable students to understand health in the wider context of society, to appreciate the range of professions involved, to develop practical understanding of inequalities in health and to learn about the diversity of common health problems seen in primary care. Objectives included the application of sociological concepts and theories, the analysis of user-centred care and the assessment of models of health care, taking into account strategies adopted by the Leicester Health Action Zone.

Students assessed not only patients' medical problems, but also the impact of physical, emotional, social and economic factors. They then returned to their study base to discuss and interpret their learning with tutors, followed by an interview with a front-line worker involved with the case before visiting the selected agencies in a subsequent session. Each group presented its case to an invited audience of community workers, health and social care workers, public sector managers, policy makers and fellow students where members are questioned and challenged.

The learning leant heavily upon shared problem-solving strategies as

a means to increase understanding of roles and responsibilities of other professions and to highlight the need for teamwork.

Eighty-six percent of the students who completed a follow-up questionnaire said that they had found the experience enabled them to understand the importance of inter-agency collaboration for regeneration.

(Leicester Warwick Medical School 2001)

This project had been introduced initially for medical students and drew on the development of community-based learning in medical education (see, for example, Thistlewaite 2000).

The methodology generates a practice-led curriculum that incorporates team development, observational study and problem-based learning building to acquire individual and team competencies (Barr 1998; Allen and Pickering 2001).

Changing practice

The NHS funded three projects in the south west of England to develop new models of interprofessional teaching and learning intended to improve education, practice and patient care. The projects operated as a collaborative, exchanging experience, working together to resolve problems and accounting to the same Board.

In Avon, Somerset and Wiltshire experienced practitioners joined action learning sets to make care for people with cancer more sensitive and more responsive by understanding the lived experience of service users, employing a continuous quality improvement cycle.

Bournemouth University co-ordinated a programme that placed service users at the centre of health improvement in three locations. In Andover, the focus was upon improving support for parents of young children, in Dorchester upon improving care for acutely ill elderly people in hospital and in Salisbury upon improving community mental health care. All comprised action learning sets, employed continuous quality improvement and involved service users.

In Plymouth, the project focused upon skills required to work interprofessionally with people who had severe, enduring mental health problems, with particular reference to their primary care. Developed around taught modules, the curriculum applied principles of interprofessional learning to collaboration while teaching evidence based practice.

(Annandale et al 2000; NHS South West 2001)

Developments in south-west England, notably in Bournemouth, enjoy close links with the Interdisciplinary Professional Education Collaborative in the USA, which is dedicated to the introduction of continuous quality improvement (CQI) into interprofessional education (Schmitt 2000). Numerous CQI projects have been introduced in the USA as a grass roots response to the pressing need to improve services following the collapse of health care reforms proposed by the Clinton administration.

Where the CQI process entails learning between the participant professions, it is increasingly treated as interprofessional education – interprofessional education with direct impact on the quality of practice (Berman and Brobst 1996; Freeth et al 2002). Some may cry foul, suspecting sleight of hand to redraw the boundaries of interprofessional education to 'prove' that it benefits practice. Others may see the redefinition as critical to put quality improvement at the heart of interprofessional education. Viewed thus, the challenge lies in building CQI into other models of interprofessional education. Bournemouth University, for example, places undergraduate students in teams employing CQI so that they can learn how to effect service improvements (Annandale et al 2000), although the general application of the CQI model may be constrained by the number of suitable placements (Barr 2000).

Changing the professions

Six courses in England prepare students for joint qualification as social workers and learning disability nurses. The impetus at South Bank University came from local learning disability service managers who believed that neither qualifying system, on its own, would equip staff adequately for the new community services being set up following the closure of a large hospital. The South Bank programme lasts three years and confers qualifications in learning disability nursing (RNMH) and social work (DipSW) as well as a BSc in Nursing and Social Work Studies.

The programme reportedly gains from combining two professional cultures, meeting the requirements of two regulatory bodies, the English National Board for Nursing, Midwifery and Health Visiting (ENB) and the Central Council for Education and Training in Social Work (CCETSW), and their commitment to partnership between education and practice. Partnership also includes people with learning disabilities who contribute to teaching on their own terms.

Two long placements follow a common foundation programme. The second of these is carried out, so far as possible, in a practice setting involving interprofessional teamwork. Weekly tutorials encourage reflection on practice – interprofessional practice – while regular seminars explore the concept of 'joint practitioner'. Service users help to

determine objectives and as teachers. Students are assessed against eight core competencies, which integrate requirements made by the regulatory bodies.

Students valued the way in which the course had helped them to make assessments holistically, work in multidisciplinary teams and establish a broad knowledge base for their practice. Learning from people with learning disabilities prompted students to reflect upon their own power and enhanced understanding of the user perspective. Service managers welcomed students' capacity to embrace both health and social needs. Of the first 15 students to graduate, 13 provided information about their subsequent employment. Seven had taken nursing posts (six in learning disability posts), five had taken social work posts (one in a learning disability post) and one had become a care manager.

(Davis et al 1999; Sims 2002)

These joint programmes came about indirectly from the Jay Committee (1979), which was intent on replacing a medical model by a social model for the learning disabilities field. The Committee recommended that the nursing qualification be replaced by a social care qualification. Nurses, parents and pressure groups were implacably opposed. Relationships between nursing and social care deteriorated as a result, frustrating efforts to establish closer collaboration in education and practice, and forcing government to reject the Jay recommendation. It called instead on the then General Nursing Councils and CCETSW to convene a joint working group to find a way forward, which they duly did with recommendations for joint training and dual qualifications (GNCs/CCETSW 1982).

Interprofessional education, as hitherto conceived, was a means to cultivate collaboration between discrete professions, based on mutual respect for boundaries, functions and values. Could it, at the same time, be an instrument of 'educational engineering' to change designations, roles and qualifications? Or would tension generated compound collaboration, as it did, at least in the short term, in learning disabilities? That tension may have been resolved in those learning disability services where dual qualification holders have been deployed, although numbers are few, impact on practice correspondingly small and independent evaluation lacking.

Dual qualifications and combined professions sit uncomfortably within interprofessional education as understood in other fields. Experience gained in learning disabilities must, however, be taken into account now that NHS workforce policies expect education, not only to promote collaboration, but also a more flexible and mobile workforce (Department of Health 2000).

Was this what the WHO meant by changing practice and the professions through education? Perhaps, for it too was frustrated by restrictions that threatened its health promotion strategies (WHO 1976, 1978). National or

international, arguments for joint studies to cultivate collaboration and create a more flexible workforce must be reconciled.

Integrating the approaches

Modifying reciprocal attitudes may under favourable conditions help to surmount barriers to collaboration, yet fail to provide the knowledge and skills necessary to work intelligently and competently with other professions and organisations. Acquiring common values, knowledge and skills may secure common foundations for collaborative practice, yet fail to surmount the attitudinal barriers to collaboration for lack of opportunity to address professional differences.

Team-building may prepare students for teamwork, yet neglect more diffuse and more diverse collaboration across agency boundaries and with communities, involving service users and carers. Problem-based learning may often be the preferred interprofessional learning method, but it is not the only one and may be more effective when used in combination with others. Community-based enquiry may ensure that learning is practice-led, but its effectiveness depends on a responsive college curriculum.

Continuous quality improvement may be the one interprofessional learning method with direct impact on practice, but its application will remain limited to locally based learning unless and until constraints can be overcome to apply it in combination with other interprofessional learning methods. Interprofessional education may be employed to remodel professions, redistributing responsibilities, redrawing boundaries and lowering barriers, and so help to implement workforce reforms, but may generate discord and frustrate collaboration. No one approach has all the answers; together they offer a promising repertoire.

Given that interprofessional education is typically short and work-based (Barr and Waterton 1996), teachers and trainers must set realistic objectives within the constraints of time and place (Barr 1996). Students and workers need to be discriminating in choosing the interprofessional learning opportunity best suited to their immediate learning needs, but with an eye to their continuing personal and professional development plan, which may include a variety of interprofessional learning experiences with different but complementary objectives. Similarly, teams need to decide which members should take advantage of which interprofessional learning opportunity in the interest of overall competence.

Longer and more complex interprofessional education programmes are being introduced in the UK, notably at undergraduate level, with time, space and resources to include diverse approaches such as those explored in this chapter. Successful integration will entail more than mixing and matching, which presupposes an agreed and coherent theoretical rationale, based on a critical and comparative evaluation of selected approaches grounded in the

evidence. Systematic reviews can help, but sources are too few and too limited to permit such analysis (Barr et al 2000; Freeth et al 2002). Prospective research will have to be undertaken, evaluating different approaches and employing consistent research methodology within a single conceptual framework. That is the next challenge.

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Paper A4

Interprofessional Education in Health and Social Care in the United Kingdom

Report of a CAIPE Survey

1996

London

CAIPE

INTERPROFESSIONAL EDUCATION IN HEALTH AND SOCIAL CARE IN THE UNITED KINGDOM

REPORT OF A CAIPE SURVEY

By

Hugh Barr

and

Sarah Waterton

ABOUT CAIPE:

the UK Centre for the Advancement of Interprofessional Education.

CAIPE, the UK Centre for the Advancement of Interprofessional Education, seeks to promote high quality developments in the practice and research of interprofessional education and training in primary health and social care. This is in order to foster and improve user and carer focused collaborative care.

It was founded in 1987 and became a registered charity in 1991. It is an independent body with some 500 individual and organisational members, comprising advisers, educators, managers, practitioners and researchers from medicine, nursing, the professions allied to medicine, social work and related professions.

Through its members, CAIPE provides a network for discussion and information exchange by means of conferences and seminars, a bulletin and occasional papers. It also promotes research, represents members' views in national and international forums, and works closely with other bodies to promote and develop interprofessional education and practice.

For more information or to join please contact

CAIPE
344 Gray's Inn Road, London WC1X 8BP.

phone: 0171 278 1083
fax: 0171 278 6604

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FOREWORD

By Dr John Horder, CBE

President of CAIPE and
Chairman of the Survey Steering Group

This paper reports on the first United Kingdom (UK) survey of interprofessional education for six years, the first since radical reforms in health, social care and education took effect, the first to cover community care as well as primary health care and the first to include Northern Ireland.

The survey sought to obtain an indication of the incidence and nature of interprofessional education initiatives in the UK. From the outset the steering group recognised that this was an ambitious task. Despite a low response rate to the first of the two questionnaires, there is much to be learned from the total response. The information obtained provides many pointers to the state of the art in interprofessional education, even though it is not possible to deduce its present scale from this survey or to make comparisons with CAIPE's earlier survey in 1988/89.

Many of the findings are encouraging. Initiatives involved almost every health and social care profession, during pre-qualifying and post-qualifying education, throughout all parts of the UK. Topics covered a wide range of contemporary health and social care issues, while many initiatives addressed the need for collaboration within and between professions and services. Many had also won the imprimatur of validating bodies, enabling participants to count their interprofessional learning towards qualifications in their respective fields. Nearly all had been evaluated. An encouragingly large number were being repeated and developed.

There is much that calls for closer study, including means to stimulate interactive learning, types of assessment and methods of evaluation. There is also much which teachers and trainers may learn from one another via the pages of this report.

Here then are findings which are full of implications for future developments, policy and planning, yet honest and realistic about the problems of investigation in this field.

April 1996

ACKNOWLEDGEMENTS

We are indebted to all who have helped in facilitating, designing and undertaking this survey: to the Department of Health for funding the work; to members of the Steering Group, Dr John Horder, Margaret Thwaites, Lonica Vanclay and Jenny Weinstein, for their support and comments; to CAIPE members who piloted the questionnaire; to Dr Ian Shaw for analysing the data, assisting in its interpretation and presentation, and for commenting on successive drafts; and to members of the CAIPE Executive Committee for comments on the final draft.

Especial thanks are, however, reserved for the respondents, without whose readiness to provide such a wealth of data this report could not have been written. Some were already closely associated with CAIPE; others have become so as a result of the survey. CAIPE looks forward to continuing collaboration with them in promoting and developing interprofessional education.

Hugh Barr

Sarah Waterton

April 1996

SUMMARY

This survey investigated interprofessional education and training in community-based health and social care throughout the UK. It was designed to:

- provide an up-to-date overview of interprofessional education and training
- facilitate networking
- provide a database accessible to CAIPE's members and interested others
- inform CAIPE's future policies and priorities
- enable CAIPE to target its services.

Two postal questionnaires were administered. The first was sent to managers, teachers and trainers in statutory and voluntary health and social care organisations and educational institutions, thought either to be running, or to know who would be running, initiatives in interprofessional education or training. The second was sent to respondents to the first questionnaire who reported initiatives that included two or more professions amongst their participants and that lasted two days or longer.

The first questionnaire requested basic information about initiatives plus the name and address of a contact person. 2,498 copies were sent out. A fifth were returned, reporting on 455 valid initiatives. For several reasons, given later (see Appendix A. The Methodology Reviewed) it was decided not to follow up the non-respondents. The second questionnaire sought more detailed information. Of the 231 copies of the second questionnaire sent out, 184 were returned (four fifths) reporting on 200 valid initiatives.

The majority of initiatives reported had started during the preceding three years. The most highly ranked reason for starting them was "meeting common learning needs across professions" followed by "responding to new/changing health/social problems". Topics ranged from audit to ethics, from collaboration to counselling, and from childbirth to palliative care.

Most were run by universities and colleges, followed by health and local authorities, but a tenth were run jointly between different organisations. They lasted from less than a day to 2 to 3 years part-time. Some were complete in themselves; others brought together participants for parts of uniprofessional courses, sometimes within modular systems.

The professional mix for participants and for teachers was similar, including education, management, medicine, nursing groups, professions allied to medicine, psychology, social work and numerous others. Some initiatives also included administrators, receptionists, voluntary workers, as well as service users and their carers.

Curriculum content emphasised learning common to the professions. Use of practice-based learning varied. Participants' learning was assessed in most cases and satisfactory completion counted towards qualifications. Most initiatives were validated, internally or externally. Most had also been evaluated, mainly in terms of process and participants' satisfaction, but few reports of evaluations had been published.

PUTTING THE SURVEY IN CONTEXT

Since the late sixties, numerous initiatives have been taken throughout the UK to enable practitioners, managers and educators from different health and social care professions to learn together. Some respond to needs held to be common across a number of professions. These include updating knowledge, eg work with the same group of service users, acquiring additional practice skills, eg in counselling, and preparation for teaching/training, research and management roles. Others create opportunities for the professions to learn from and about one another, enabling them to compare roles and responsibilities, powers and duties, and opportunities and constraints as means to cultivate mutual respect and collaboration, whether within the same team or through looser networks. These purposes are not mutually exclusive. They co-exist, more or less comfortably by design or by accident.

Initiatives are to be found in the workplace, in educational settings and elsewhere. They are commissioned and run by employing bodies, universities and colleges, validating bodies, professional associations, trade unions, voluntary organisations and pressure groups amongst others, either individually or in partnership.

Many contribute to continuing professional development and post-qualifying studies, fewer so far to pre-qualifying studies, although resistance to their development seems to be diminishing.

At one level, the drive towards interprofessional education springs from reforms in health and social care. Government policy statements, audit reports and official enquiries have called for closer collaboration within and between health and social care professions in community care, primary health care, health education, child protection, mental health and other fields.

Invariably, interprofessional education has been commended to promote collaboration (Barr, 1994; Leathard, 1994; Soothill, 1995; and Weinstein, 1994). As service needs and policy trends create greater pressure for interprofessional working, both managers and practitioners value it more highly and increasingly want to undertake shared learning. (Baker & Wilmer, 1995; Tope, 1994; Vanclay, 1995). At a more profound level, it can be seen to spring from the need to counter trends towards elitism, rivalry and inflexibility resulting from the process of professionalisation (Carrier and Kendall, 1995).

Interprofessional education also has to be understood within the context of wide-ranging reforms in education and training. These include the integration of specialist professional schools into the mainstream of higher education, the extension of modularisation to include professional education, the expansion of open learning, the devolution of training budgets, the application of the purchaser/provider split and, by no means least, the extension of Scottish and National Vocational Qualifications to include professional education. (Barr, 1994; Weinstein, 1994).

A bewildering array of terms describe initiatives, ranging from "joint training" to "shared learning" and from "multidisciplinary education" to "interprofessional education". All too often they are used interchangeably, less often with precise meanings which enjoy general currency. Consistent with CAIPE's title, interprofessional education is the preferred term throughout this report.

INTRODUCTION

An Earlier Survey

In 1987 CAIPE commissioned the Institute of Community Studies to establish the extent and nature of recent "initiatives" in interprofessional education in Great Britain which involved primary health care professionals. A postal questionnaire was sent to people likely to have organised or taught on such initiatives held during 1987/88 (Shakespeare et al. 1989).

An Interim Review

Pending an opportunity to mount another survey, CAIPE commissioned the School of Social Studies at the University of Nottingham to undertake a "Review of Shared Learning". This comprised interviews with people at the leading edge of developments to identify trends and issues (Barr, 1994), telephone surveys in two English counties (Shaw, 1995) and a critique of evaluations of initiatives reported in the UK literature (Barr and Shaw, 1995).

The interviews highlighted the impact of recent reforms not only in health and social care, but also in higher and vocational education. This seemed to account for a marked increase in the number of occasions when health and social care professions learned together. There were, however, competing agendas. While some initiatives seemed to have been launched to facilitate collaborative practice, others seemed to have been inspired by the need to rationalise education and training systems, to effect economies of scale and to ensure viability in cost-conscious times.

The telephone surveys provided an early warning of growing difficulties in picking out shared learning which aimed to improve collaboration. The problem was seen to lie in distinguishing between those occasions when professions simply learned side-by- side and those when they learned from and about one another, about their respective values, perceptions, roles and responsibilities.

The review of UK literature summarised 19 selected evaluations of interprofessional education. This prompted questions about the extent to which other initiatives had also been evaluated, the issues addressed and the methods employed, questions about which findings of the present survey shed light.

Findings from the review reinforced the need to undertake another survey and provided pointers for its design.

A New Survey

While the Review was in progress, CAIPE had made a successful application to the Department of Health "to repeat and extend the (earlier) survey to cover professionals working in both primary health and community care and, by comparative analysis, measure changes, innovations and developments in shared education". This second survey was to "include information about subject and

content of courses, participation levels, the nature of professional mix, the cost and professional time factors, purchasers of education, frequency and duration of courses, geographical distribution, educational methods and evaluation of outcomes". This time CAIPE decided to undertake the survey itself.

Funding available from the Department was, however, less than requested. In consequence, the researchers' time was reduced by more than half, ie three person days per week instead of the seven person days originally proposed (for one year). One of us (HB) was retained for one day per week and the other (SW) made available for two days per week (out of four for which she was employed by CAIPE). Cuts in the proposal were, however, kept to a minimum.

Within these constraints, plans began to take shape during the summer of 1994. A Steering Group was appointed, with which all decisions were taken regarding the form and scope of the survey.

Consistent with the agreed brief, methodology followed closely that for the previous survey (see Section 2). Comparable methods would, it was anticipated, produce comparable findings.

Purposes

CAIPE had five purposes in mind:

- to obtain an up-to-date overview of the incidence, aims, form, methods and content of interprofessional education throughout the UK, while monitoring changes since the earlier survey;
- to use the data obtained to facilitate networking and cooperation between initiatives in neighbouring areas and engaged in similar tasks;
- to establish an operational database accessible to its members and to interested others, including policy makers, managers, teachers, trainers, practitioners and researchers;
- to use those data to inform its own policies and priorities in promoting and developing interprofessional education;
- to assist in targeting its information, advisory and educational services.

While comparisons between the 1988/89 and the present survey were seen to be important, they were not seen to be over-riding. The survey would be repeated, not replicated in the strict sense of the term, although some of the same questions would be retained to provide bases for comparison.

A Definition

It was decided to collect data about education and training initiatives:

- where two or more health and/or social care professions learn together;
- during basic or continuing education and training;
- whether in the workplace, college or university, or elsewhere;

- whatever the duration;
- in any part of the United Kingdom;
- in respect of any service based in the community;
- without restriction in terms of types of service user;
- completed between 1 October 1993 and 30 September 1994.

Occasions when health and social care professions studied alongside one another seemed to be on the increase. While the focus for CAIPE was those which aimed to promote collaborative practice, it was interested in knowing about as many occasions as possible where professions studied together, from which it might be able to determine later which held the potential to be developed to promote collaboration. CAIPE would then be better placed to target information and formulate priorities.

Boundaries

Since 1989, CAIPE had extended its remit to take in community care, in addition to primary health care. While the earlier survey had covered community care (and other fields) only when primary health care professions participated, it now seemed appropriate to include it in its own right, alongside primary health care. Indeed, merit was seen in including as many initiatives as could be found where health and/or social care professions learned together for whatever purpose in community-based (but not institutionally-based) services.

The earlier survey (Shakespeare et al. 1989) had covered initiatives which included one or more of five professions known to be either working in or otherwise involved with primary health care, namely community midwives, district nurses, general practitioners, health visitors and social workers. To have stuck with these would have been incompatible with the decision to treat health and community care evenly. It would have also excluded many professions known to be included in current initiatives. It was therefore decided to include all health and social care professions, without listing them, for fear of inadvertent omissions.

Finally, all concerned were keen to include Northern Ireland which forms part of CAIPE's UK remit, not least because its Health and Social Services Boards provided a unique opportunity to see how initiatives had been developed in relation to their unified structure.

The resource implications of these decisions were acknowledged at every stage, recognising that little would be held in reserve for contingencies.

Preliminary Consultations

During the preparatory stages of the survey, CAIPE was in consultation, amongst others, with the National Health Service Executive, the Social Services Inspectorate, the Association of Directors of Social Service (which gave its formal endorsement), and the Central Council for Education and Training in Social Work.

METHODOLOGY

Postal Questionnaires

A single questionnaire was devised in the first instance. This was derived from the one used for the 1988/89 survey, but included many additional questions. It therefore needed to be piloted. Accordingly, the draft was sent to 29 CAIPE members asking them to fill it in for an initiative which they had run or in which they had participated.

Sixteen copies were returned completed. Other comments took the form of letters. The consistent criticism was that the questionnaire took too long to fill in and that this would be off- putting for potential respondents. It was therefore decided to reduce the overall number of questions and to divide the collection of data into two phases using separate questionnaires.

The first questionnaire was sent to the following groups throughout the UK between November 1994 and January 1995:

Health Service Trainers

Facilitators in Primary Health Care
Trainers in Community-based Trusts

Joint Appointments

Joint Trainers for Health and Social Services
Tutors of Joint Practice Teaching
Initiatives for Nursing, Occupational Therapy and Social Work

Medicine

Undergraduate Medical School Deans
Postgraduate Medical School Deans
General Practice – Regional Advisers
General Practice Tutors
General Practice – Course Organisers

Nursing Groups

Directors of Nurse Education
Directors of Courses in District Nursing and Health Visiting
Directors, Tutors and Teachers in Midwifery Education

Professions Allied to Medicine

Course Organisers

Social Work

Tutors of Qualifying Courses
Post Qualifying Coordinators
Training Officers in Social Services/Social Work Departments

Voluntary Sector

Members of the Training Network of the National Council of Voluntary
Child Care Organisations

Other

Trainers for Community Care
Contacts provided by Respondents to the Pilot Questionnaire
Teachers in Membership of CAIPE

As a further means to identify initiatives, a proforma was interleaved in the November 1994 mailing of the CAIPE Bulletin and the Journal of Interprofessional Care, asking readers to draw attention to initiatives.

Information volunteered, with additional names suggested by respondents to the questionnaire, provided more than a hundred further people to whom questionnaires were sent. Copies went out in January to contacts who had been notified in time to be included in the survey. Contacts suggested too late for inclusion in the survey have been followed up subsequently so that information about their initiatives can be included in CAIPE's operational database.

A covering letter asked respondents to complete a questionnaire for each initiative which they had run during the year under review. In some instances, this entailed a considerable amount of work. The first questionnaire asked for the title of the initiative, its place in basic or post-qualifying education, organisations which instigated and ran it, location, duration, when first run and professions included.

The follow-up questionnaire to the longer initiatives asked whether they constituted the whole or part of participants' learning, and for information about factors influencing the decision to launch them, the pattern of study, frequency, professionals represented as teachers and participants, content, learning methods, assessment, credit for awards, validation, evaluation and future plans.

Both questionnaires included a mix of closed and open-ended questions. Closed questions were preferred, wherever practicable, to simplify coding and analysis, and with a view to making comparisons with the previous survey. Open-ended questions were used, however, where earlier research provided few pointers to likely answers, and to avoid arbitrary restriction of responses.

Copies of the questionnaires and explanatory notes can be found in Appendix D.

Some Key Questions

The choice of questions was informed by developments in education and practice since the 1988/89 survey, including outcomes from the Review of Shared Learning (Barr, 1994; Barr and Shaw, 1995; and Shaw, 1995) and from a survey of interprofessional masters courses (Storrie, 1992).

Some of the key issues in the first questionnaire were:

- implications of the purchaser/provider split for interprofessional education (questions 3 and 4);
- partnership in purchasing/providing interprofessional education (questions 3 and 4);

Some of the key issues in the second questionnaire were:

- competing arguments for launching interprofessional education (question 4);
- mixing and matching teachers and participants (questions 8, 9, 10 and 11);

- addressing commonalities and differences between professions (question 12);
- use of didactic teaching or interactive learning methods (question 13);
- means of assessing individual and group learning (question 15);
- crediting interprofessional education towards qualifications (question 16) ;
- validation of interprofessional education (questions 17 and 18);
- bases for evaluation (question 21).

Response rates

- **to the first questionnaire**

Of 2,498 copies of the first questionnaires sent out, a quarter were returned. Of these, 188 were returned blank. A further 53 reported initiatives included only one profession, and one was a duplicate. This left 251 valid responses, reporting on 316 initiatives in separate questionnaires, with a further 139 reported on the same questionnaires. This added up to 455 initiatives. A breakdown of respondents by category is given in Table a, Appendix B (page 47).

Some respondents sent prospectuses, either for the initiative reported in the questionnaire or for others. Some also sent annual calendars listing numerous initiatives. It would have been neither reasonable nor practical to ask respondents to complete additional questionnaires for each of these initiatives. Nor, on the basis of the information provided, could the researchers always be certain that the initiatives would have met their criteria for inclusion in the survey. Nevertheless, it became increasingly clear that respondents were responsible for substantially more initiatives (ranging from day workshops to masters courses) than they had recorded on their questionnaires. This indicates that the survey's findings substantially understate the actual incidence of interprofessional education, without making any allowance for returns which non-respondents might have made.

Lack of time and funds precluded sending written reminders and telephone calls as originally envisaged. The steering group was advised that even with reminders, the response rate might not increase significantly and decided to concentrate on seeking more detailed information about reported initiatives. Possible explanations for the limited response are discussed as part of the review of methodology in Appendix A.

- **to the second questionnaire**

A copy of the second questionnaire was sent to each of the respondents to the first questionnaire who had indicated that his or her initiative had lasted two days or longer (having first checked that they had indeed included two or more professions).

An extra copy was sent with a reminder letter to all those who did not respond by the deadline. These were followed up by phone calls to those who still had not replied. 184 replies were received in total which provided information about 200 interprofessional initiatives. The second questionnaire therefore achieved an 80% response rate.

Analysis and Interpretation

Although respondents had been asked to complete a separate questionnaire for each initiative, information provided took a variety of forms. Course brochures and letters were sent as well as single questionnaires filled in for two or more initiatives. This made analysis difficult.

Data from the multiple replies supplied on a single questionnaire were analyzed where possible. While the brochures and letters could not be analyzed as part of the survey, they have proved to be invaluable in compiling CAIPE's database (see Appendix C, Page 51). Furthermore, information about initiatives in the planning stage (which therefore fell outside the period covered by the survey) has been followed up for inclusion in that database.

The process of analysis included the coding of open-ended questions by the researchers. Responses were grouped into categories for each question following intensive scrutiny of replies. Data entry and computer analysis were then undertaken for CAIPE by Dr Ian Shaw in the School of Social Studies at the University of Nottingham. He used the Statistical Package for the Social Sciences (SPSS), which is a comprehensive and integrated system for entering, managing, analysing and displaying data.

Within the constraints of the budget, a limited number of cross tabulations were tested. They included an attempt to find correlations between reasons for launching initiatives, curriculum content, learning methods and types of evaluation. None reached a statistical level of significance. In view of this, they have been excluded from this report.

Interpretation of findings was a collaborative effort between the researchers and Ian Shaw. The findings from those initiatives reported in questionnaires completed and returned to us are now outlined.

FINDINGS FROM THE FIRST QUESTIONNAIRE

Titles and Topics

Initiatives covered a wide range of topics, which defied easy classification. Reference was made to patients or clients by life stage, or by care appropriate at that stage (childbirth, paediatrics and midwifery, children, elderly, terminal illness, palliative care), to chronic illnesses (asthma; epilepsy; diabetes; multiple sclerosis), to community care, to collaboration, to health education and promotion (including sexuality; HIV; women), to disabilities (learning; physical; sensory), to mental health, to research, to health, community or welfare studies, to counselling, to management (including audit; information systems), to education and training (general and continuing), and to ethics. Frequencies are grouped under these headings in Table b, Appendix B (see page 48).

A selection of the initiatives, giving both titles and participating professions, are listed below in order to give a flavour of the range reported.

Short initiatives that lasted less than two days

Titles and topics of initiatives under two days included the following:

- disability awareness workshops for occupational therapists and social workers;
- child protection seminars for health visitors, teachers, social workers; and police;
- outdoor education for the mentally handicapped for social workers, teachers and community nurses;
- epilepsy and asthma for social workers, nurses and teachers;
- clinical exercises for medical and pharmacy students;
- cardiopulmonary resuscitation for nurses, medics and paramedics;
- impact on young children of maternal postnatal depression for GPs, health visitors, school nurses, psychologists and social workers;
- collaborative community care planning for nurses, GPs, social workers and the voluntary sector;
- achieving positive health in old age for nutritionists, nurses and GPs;
- patient communication and basic counselling for nurses, GPs, paramedics, social workers, clergy and the voluntary sector;
- managing depression in primary care for GPs, nurses and counsellors;
- joint study days for GP trainees and midwifery students and for social work and nursing students;
- managing change, team development and team building for GPs, nurses; receptionists and practice managers

- HIV/Aids study days for social workers, GPs, nurses, youth workers and occupational therapists;
- managing aggression for dentists, doctors, pharmacists, nurses, practice managers and optometrists;
- changing childbirth for midwives and GPs;
- care of the elderly for GPs, hospital doctors, occupational therapists and nurses;
- use of statistics for clergy, solicitors, GPs, surgeons and nurses;
- black mental health issues for community nurses and social workers;
- multidisciplinary study day for tutors of general practice, social work and nursing students;
- weekly lunchtime clinical meetings for practice staff including GPs, counsellor, acupuncturist and osteopath.

Initiatives that lasted over two days

Professional Development

Of the two hundred reported initiatives lasting over two days, just over half comprised a continuing professional development. One third of these carried credit towards a qualification (which was sometimes PGEA – the postgraduate education allowance for doctors). While almost half of those concerned with primary care and mental health carried some credit towards a qualification, few did so in community care or child protection.

Just under a third of the reported initiatives in continuing professional development were concerned with team development in primary health care, team building and management and a similar number were concerned with specific primary health care topics such as communication skills, HIV/Aids, asthma, diabetes and cancer. Just under a fifth were concerned with community care, including topics such as joint foundation, needs led assessment, community care in context, planning and managing community care. The remainder were concerned with child and family services and mental health and learning disability. One example dealt with palliative care, one with bereavement and one with research and evaluation skills.

Interprofessional Degrees

Almost one sixth of the 200 reported initiatives over two days long were interprofessional degrees. Two initiatives provided a joint qualification (a nursing and a social work qualification for working in learning disability). Four were undergraduate/top up degrees (BSc Health Studies and BA Hons Social and Professional Studies being two examples) while the remainder were postgraduate degrees.

Some examples of the titles of the postgraduate interprofessional degrees were:

- MSc Health Professional Education;
- MSc in Interprofessional Studies;
- MA in Health and Social Policy;

- Masters Primary and Community Care;
- PGDiploma/MA in Collaborative Community Care;
- MA Ed. Health Education and Promotion;
- Diploma/MA in Child Protection;
- Diploma in Family Therapy/ Certificate in Family Counselling;
- MSc/PGDiploma in the Care of Elderly People.

Interprofessional Modules

One fifth of the 200 reported initiatives were interprofessional modules which comprised part of an undergraduate degree.

Those counting towards undergraduate degrees included:

- health promotion, child protection and communications skills shared by nursing and medical students;
- community studies shared by community nursing and social work students;
- foundations of health and problem based learning shared by nursing, radiography and occupational therapy students;
- aspects of anatomy and physiology shared by orthoptics, speech therapy and dentistry students;
- multidisciplinary induction for radiography, physiotherapy and midwifery students;
- common foundation and core subjects shared by students of the different nursing specialisms;
- mental health and professional practice and partnership with users shared by social work and occupational therapy students;
- multidisciplinary foundations and healthcare studies shared by dietetics, speech therapy, podiatry and occupational therapy students;
- study skills shared by nursing and radiography students;
- basic counselling skills shared by nursing, management, education students and students of the professions allied to medicine;
- health care ethics shared by nursing, midwifery and medical students;
- helping professions workshops for GP and health visitor trainees and social work students;
- interprofessional issues for nurses and social workers;
- working collaboratively in the community for social work and education students.

Just two counted towards a postgraduate degree: organisational cultures and teams shared between nursing, physiotherapy, dietetics, speech therapy and radiography students; and working with mixed parentage children and families shared by health visitors and social workers.

Practice Supervision

Fourteen of the 200 reported initiatives were concerned with practice supervision. These included joint practice teaching for nursing, social work and occupational therapy clinical placement supervisors; introduction to practice teaching for physiotherapy, occupational therapy, dietetics and radiography supervisors; medical mentors workshops for GPs, community nurses and practice nurses; trends in medical education for GPs, surgeons, radiographers and pharmacologists and training the trainers workshops for GPs, consultants and practice managers.

Pre-qualifying and post-qualifying studies

Of the 447 initiatives for which information to this question was provided, three quarters comprised post-qualifying studies or continuing professional development and far fewer, an eighth, provided basic professional education and training. Modular initiatives were sometimes used at both pre-qualifying and post-qualifying stages.

Organisations instigating and running initiatives

It was thought helpful to see how the institution of the purchaser – provider split had affected the manner in which interprofessional education was "instigated" and "run". The initiatives reported were most often instigated by universities or colleges, or by health authorities, trusts or boards, very few by local authority social services departments (see Table 1).

Most initiatives seem to have been run either by the same organisation, or within the same category of organisation, as instigated them. Colleges, universities and voluntary organisations seem to have been commissioned by health authorities, and to a lesser extent local authorities, to run some initiatives in addition to those which they had instigated. More initiatives were jointly instigated than jointly run.

Table 1.

Organisations instigating and running initiatives

	Instigating Number	%	Running Number	%
Universities and Colleges *	154	33.8	186	40.9
Regional/District Health Authorities, Trusts and Boards **	146	32.1	126	27.7
Joint between any groups ***	66	14.5	49	10.8
Voluntary Bodies	29	6.4	34	7.5
Local Authority Social Services	21	4.6	19	4.2
Professional/Validating Bodies	14	3.1	12	2.6
Individual Tutors/Trainers	8	1.8	7	1.5
Practice team/workplace	7	1.5	6	1.3
Commercial/Private Bodies	2	.4	4	.9
Other Single Bodies	1	.2	3	.7
Not Known/No Information given	5	1.1	9	2.0
Totals	455	100	455	100

* Includes postgraduate medical centres.

** Includes Health Boards in Scotland, and Health and Social Services Boards in Northern Ireland. Also includes initiatives reported as being within the Vocational Training Scheme or comprising Continuing Medical Education, of which there were 13 and 12 respectively.

*** See Figure 1.

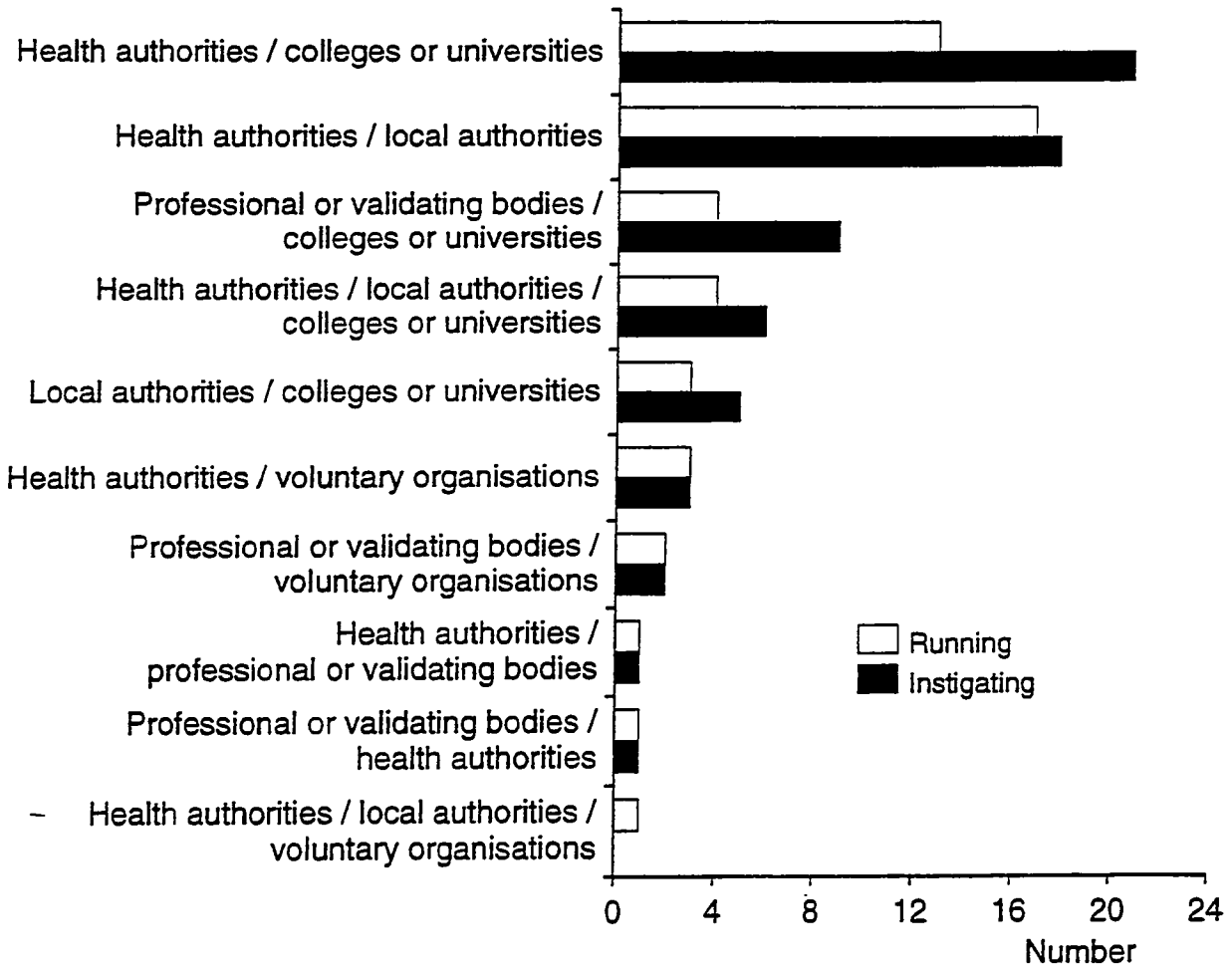
Instigating and Running Initiatives Jointly

Sixty six initiatives were instigated jointly by more than one type of organisation (see Figure 1). The most common combinations were health authorities with universities/ colleges or with local authority social services departments.

Not all of these were run jointly. Having instigated an initiative together, health and local authorities nearly always ran them together (with just one exception). On the other hand, when health authorities had jointly instigated courses with universities/ colleges, they were less involved in the running of them. Nevertheless, for the initiatives reported, a significant proportion of them (over half) still played a role in running the initiatives. Although a much smaller number are reported, a similar proportion of local authorities continued to help with the running of initiatives they helped plan.

Professional/validating bodies, having contributed to the planning for an initiative with a college or university, were less likely to be involved with the running of it.

Figure 1 Combinations of Organisations Jointly Instigating and Running Initiatives



NB. Health authorities includes boards and trusts.

The following is an example of a shared learning initiative jointly instigated by health authorities and local authorities. It is the first of a number of examples taken from the literature returned with the questionnaires and included in this section to help describe the range of initiatives and illustrate comments made.

The Inter-Agency Community Care Training Team comprised representatives from the District Health Authority, the Family Health Services Authority and the Social Services Department. It had been set up with a 21 months lifespan to promote and coordinate joint training to implement the NHS and Community Care Act. Members were accountable to senior managers in their respective authorities, who comprised the Steering Group.

Following internal consultations with trainers and operational managers in each authority, workshops and seminars were to be promoted to facilitate closer collaboration between hospitals, community health services and social services in implementing community care policies.

Short term aims included developing a network for information exchange, devising a holistic training strategy, and updating and reviewing that strategy, and preparing for the new assessment arrangements.

Long term aims included developing structures for inter- agency collaboration, identifying facilitators, co- ordinating developments, monitoring and evaluating impact and effectiveness of the Training Team, and identifying shortfall in training provision.

Particular attention was to be paid to discharge planning. One of the key philosophies of the Training Team was that by providing information and forums for people to exchange ideas, interprofessional barriers would be eroded and staff themselves empowered to provide a quality service for their consumers.

NB Since the time of collecting information for the survey, the initiative has developed and has been integrated into the social services staff development unit, which has a multi-agency steering group.

Regions and Countries

Table 2 gives the distribution of the initiatives between the four countries of the UK, with a breakdown for England by region. It shows that they were widely spread.

Table 2.
Location of Initiatives by Country and for England by Health Authority Region.

Country	Number	% of Total
Scotland	41	9.0
Wales	28	6.2
Northern Ireland	14	3.1
Breakdown for English Regions		
Northern and Yorkshire	73	16.0
North Thames	56	12.3
North West	58	12.7
South Thames	40	8.8
South and West	40	8.8
Anglia and Oxford	36	7.9
Trent	34	7.5
West Midlands	23	5.1
More than one country/region	9	2.0
Question not answered	3	0.6
Grand Total	455	100

Venues

Of the 455 valid initiatives, approximately the same number were in the place of employment (149) as in college or university (147) and a further 88 in hotels or conference centres (see Table 3). Many of the remaining 71 elsewhere were in post-graduate medical centres, others including: a magistrates court, sports and leisure centres, and community and neighbourhood centres. Convenience and circumstance seemed often to determine choice.

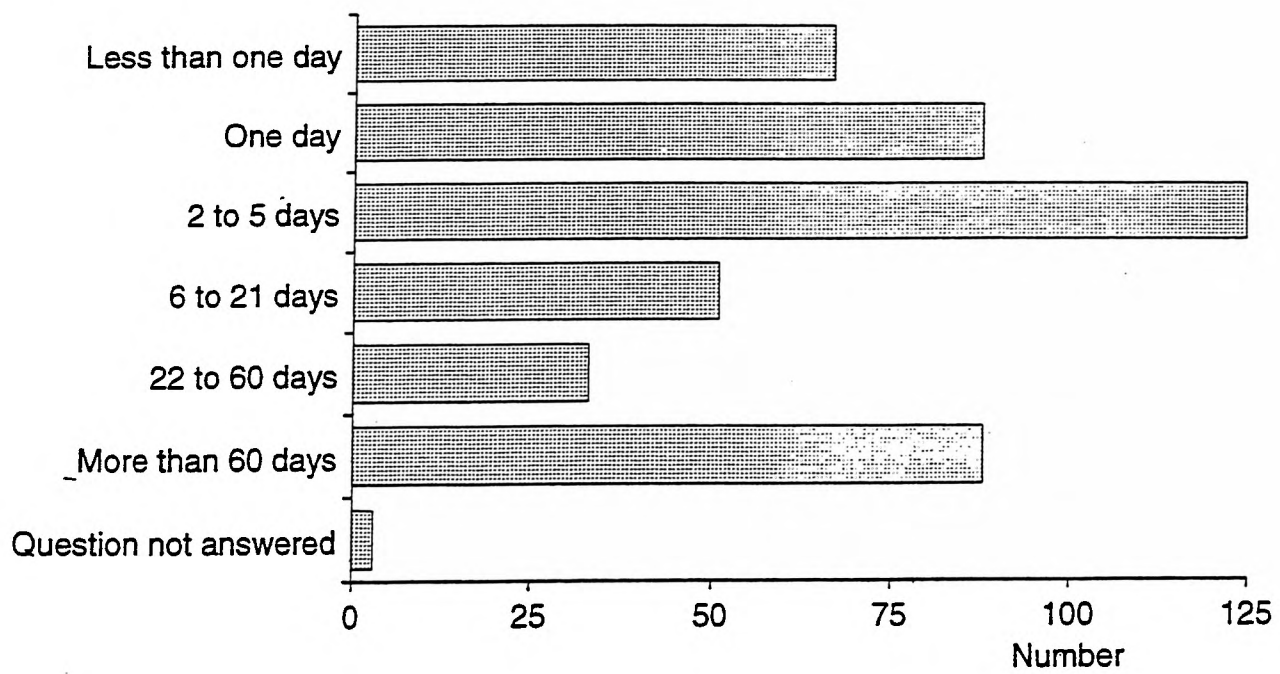
Table 3.
Venues for initiatives

Venue	Number	%
College or University (C/U)	147	32.3
Employer's Training Centre (ETC)	92	20.2
Hotel or Conference Centre	88	19.3
The Workplace	57	12.5
Both in C/U and in ETC	2	0.4
Other	65	14.3
Question not answered	4	0.9
Total	455	100

Length of Initiatives

A third of initiatives reported lasted less than two days. However, the modal length of initiatives was two to five days. Nearly one in five lasted 60 days or longer including some where this was spread over a period of two years.

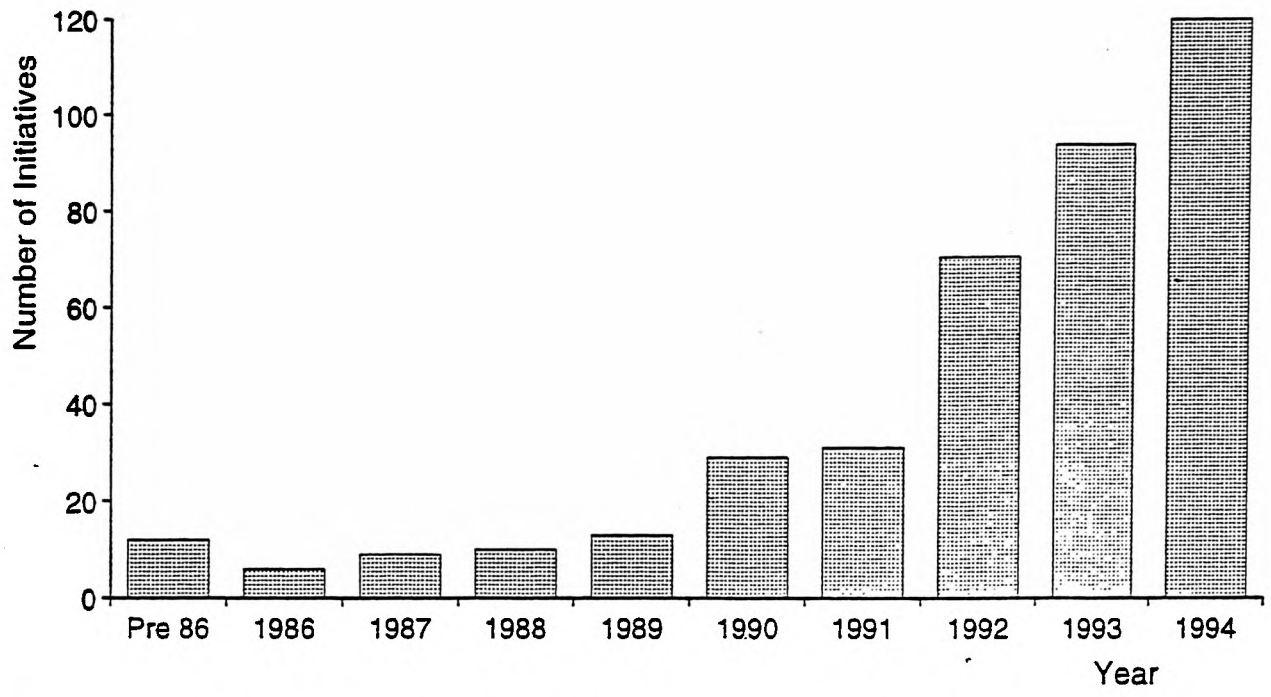
Figure 2 Length of Initiatives



When initiatives started

Most initiatives operational during the year under review (October 93 to September 94) were of recent origin (see Figure 3). Seven out of ten had started within the preceding three years.

Figure 3 Year when Initiatives were First Held



While some had simply been repeated, others had evolved in the light of experience and changing circumstances. The following example shows how an interprofessional education and collaborative research initiative evolved from a day release course and project work for separate professions.

At first the University ran courses on research methods for one or other of the helping professions. These comprised half a day per week over 12 weeks. Each participant was helped to devise a research plan on an issue arising from his or her practice. Support was provided in carrying out the research over the following 12 months. Some participants completed their projects, others not. Failure to complete was attributed variously to such reasons as the participant's position in the agency, staff shortages, and changing jobs to a setting where the research topic was no longer relevant nor enjoyed the support of management.

A structure was seen to be needed which avoided isolating participants from their agencies. The introductory course was abandoned. Instead of seeking to attract individual participants, discussions were held with managers about their current interests and concerns, from which research topics and potential researchers emerged.

Each project was in three phases: tapping the knowledge of practitioners; undertaking the research; and disseminating findings and utilising research. As projects developed, they became more than research and included elements of staff development and team building.

These developments encouraged University staff to reintroduce research courses for individual participants with substantial modifications. A two year programme was devised for managers and senior staff in health, social services and related fields who wanted to pursue their own research projects in the workplace. Senior managers were involved from the outset in defining the research topic and were invited to regular meetings during the programme to review progress.

Focus groups brought together participants engaged in the same task, often across professions, agencies and work settings. University staff were alive to possibilities for parallel projects in different agencies and for consortia to engage in "partnership research".

FINDINGS FROM THE SECOND QUESTIONNAIRE

The second questionnaire was sent to all respondents to the first who reported that their initiative had lasted two days or longer. Replies totalled 200, although not all questions were answered in each case. Hence, the number of valid replies varied for each question and was often less than 200.

Reasons for Launching Initiatives

Respondents were asked to rank ten statements from the most to the least influential in deciding to launch the initiative. The statements were derived from interviews during the earlier review of shared learning (Barr, 1994). Some referred to health and social care, others to higher and vocational education with the object of seeing which of the two sets of issues was the more influential in the opinion of respondents. Of the five health and social care statements, two referred to effecting change (implementing policies and dealing with problems), two to collaborative practice (coordinating services and promoting teamwork) and one to flexibility and transferability in the workforce. Of five educational statements, one referred to marketing and viability, one to commonalities of learning needs across professions, one to learning from and about other professions, one to widening the choice of available studies and one to implementing education policies.

Starting with the statements most often ranked top, the order was as follows:

1st	meeting common needs across professions;
2nd	responding to new/changing health/socialproblems;
3rd	enlarging markets/ensuring viable numbers;
equal 4th/5th	integrating and coordinating services to users and promoting teamwork;
6th	implementing health and social policies;
7th	implementing educational policies;
equal 8th/9th	widening choice of studies and creating a flexible/transferable workforce;
10th	learning from and about one another.

No clear patterns emerged regarding the relative influence of the health and social care statements compared with the education statements. Most striking was the bottom place occupied by "learning from and about one another". However, using an alternative analysis, based upon the frequency with which each statement appeared in the top five (See Table c, Appendix B), "learning from and about one another" occupied third place.

Few respondents wrote in other factors influencing the decision to launch the initiative. Amongst other factors given were promoting research thinking in the workplace and developing advanced practice.

Some respondents added comments. One said the initiative had been prompted by concern to bring together top managers to develop a "real understanding" of professionals and service users. A second emphasised responding to users' needs, not organisational needs or coordination.

Patterns of Study

Whole and Part

Of the 164 initiatives for which information was provided, nearly two thirds constituted the whole learning for the participants. The remainder comprised part of the learning shared between two or more discrete courses.

Block, Intermittent and Modular

Of the 189 initiatives for which information was provided, about a third comprised a single and discrete block of learning, a third included intermittent periods of shared learning spread over a period of time, and a third were provided as units of shared learning within a modular system.

Some respondents provided descriptions of their modules. A few initiatives reported included a sequence of modules for two or more professions over a period of time. The following example describes one such recently developed integrated approach.

The undergraduate courses for occupational therapy (OT) and physiotherapy offered in one university interlocked. Twelve modules (including some options) were completed in their entirety by both groups of students. Parts of a further seven modules were studied together, with other parts kept separate. The remaining ten modules were wholly separate, five for OTs and five for physiotherapists. By year three the optional modules offered were a mixture of profession specific and those studied together.

As the following outline shows, studies became more integrated as the three years progressed.

MODULES

Shared modules	Joint modules	PT or OT specific	
		OTs	Physiotherapists
Year One Biological science Behavioural science Teaching and learning Methods of inquiry Managing in the workplace Biomechanics	Communication/ Frames of reference	Needs analysis/ Applied social sciences Independent living Creative activities Work and leisure	Manual therapy Electrotherapy Human movement Kinesiology/ Applied anatomy
Year Two Teaching and learning Methods of inquiry Managing in the workplace	Group work and ethics Musculoskeletal Community focus Neurology Lifestyle Cardiovascular	Mental health	Respiratory
Year Three Optional modules Teaching and Learning Methods of inquiry Managing in the workplace			

NB. To date for the three third year optional modules a large number of students have chosen profession specific options.

Residential and Non-Residential

Of the 194 initiatives for which information was provided, four fifths were non-residential. One tenth were offered as residential and non-residential.

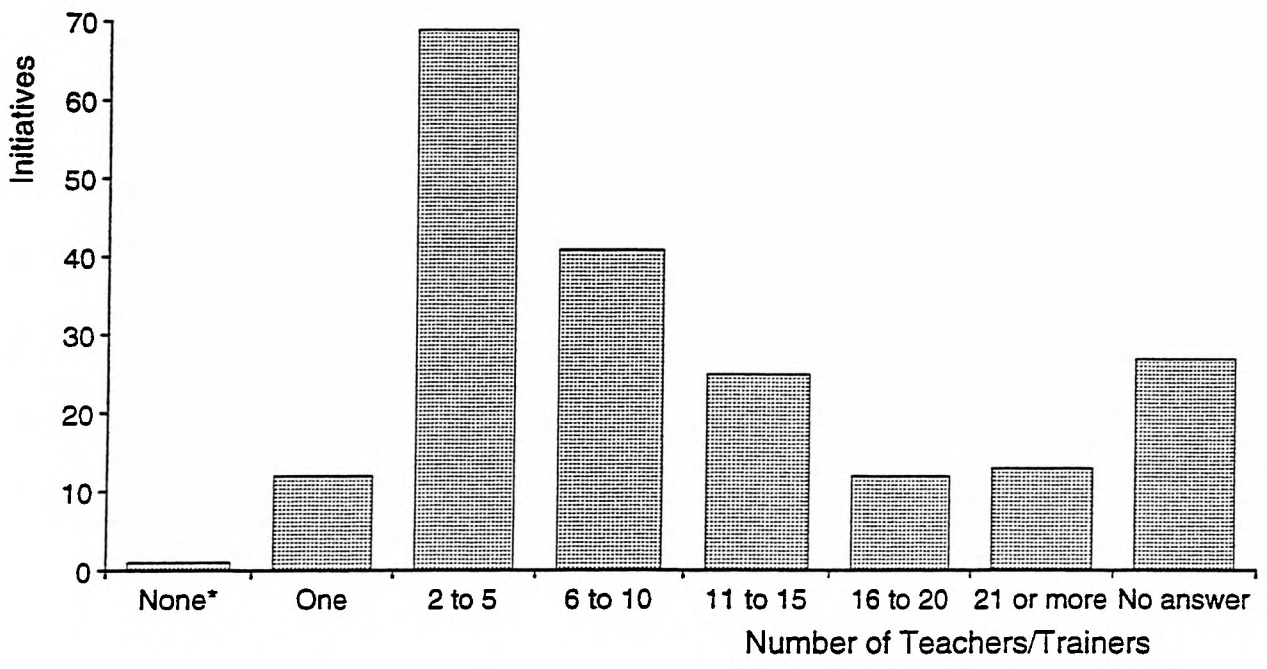
Times Run

Of the 180 initiatives for which information was provided, almost half had been run only once so far, a quarter had been run four or more times and the remainder had been run two or three times.

The Teachers

The number of teachers/trainers ranged from one to 60 (see Figure 4). At one extreme, brief and small-scale initiatives were reported which called upon help from a solo facilitator or tutor. At the other extreme, complex modular systems were reported to which many teachers contributed to greater or lesser degree.

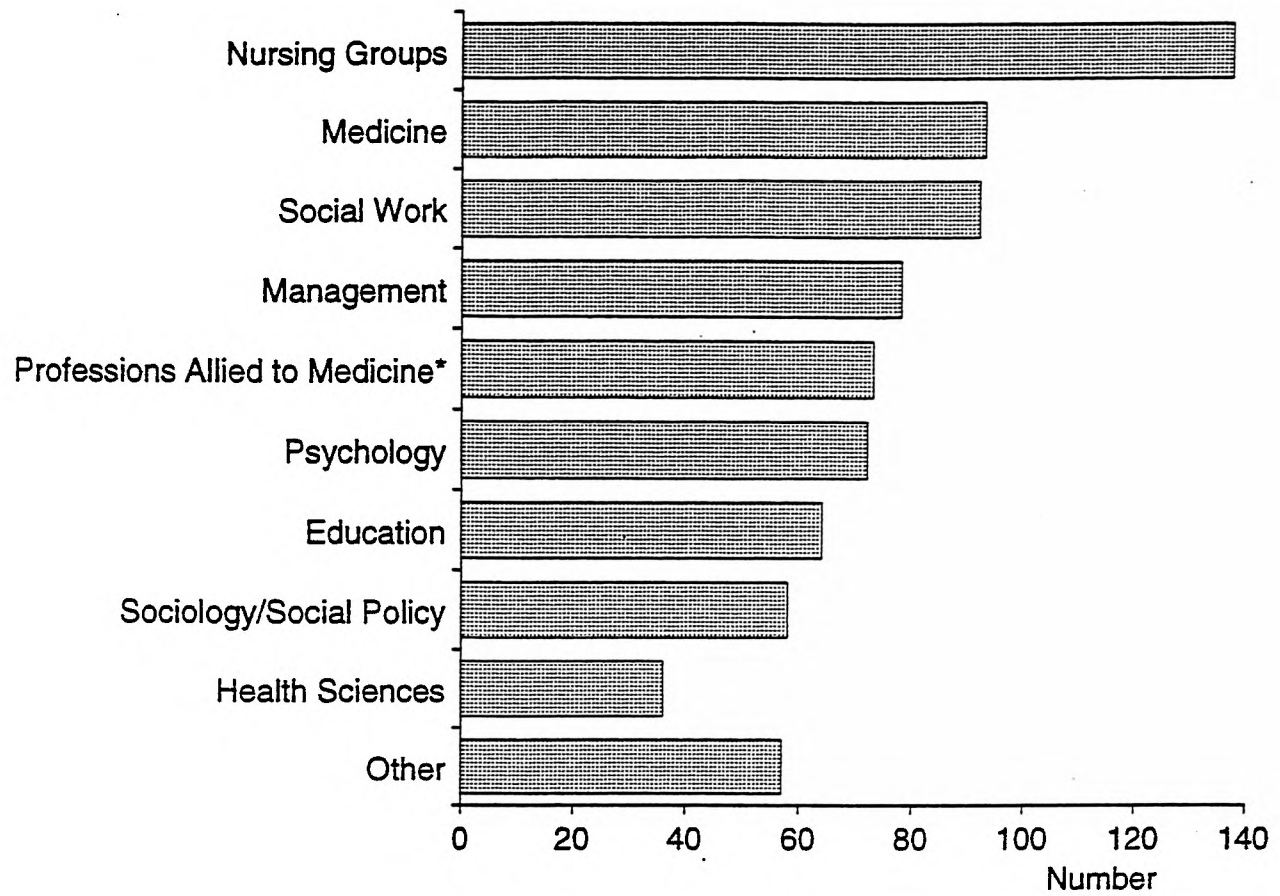
Figure 4 Number of Teachers/Trainers per Initiative



* self-directed group using open learning materials

The professions and disciplines of the teachers and trainers are given in Figure 5. Nursing was the most frequently represented profession amongst teachers. (137 initiatives out of 200 had nurse teachers). They were followed by medicine (with 93 initiatives out of 200 having teachers of medicine) and social work (with 92 initiatives out of 200 having social work teachers), with substantial numbers from management, professions allied to medicine, psychology, education, sociology/ social policy, and health sciences in that order. "Other" included dentistry, housing, law and research. In addition, one respondent mentioned involving users and their advocates, as well as voluntary sector workers.

Figure 5 Number of Initiatives including each Profession/Discipline amongst its Teachers/Trainers

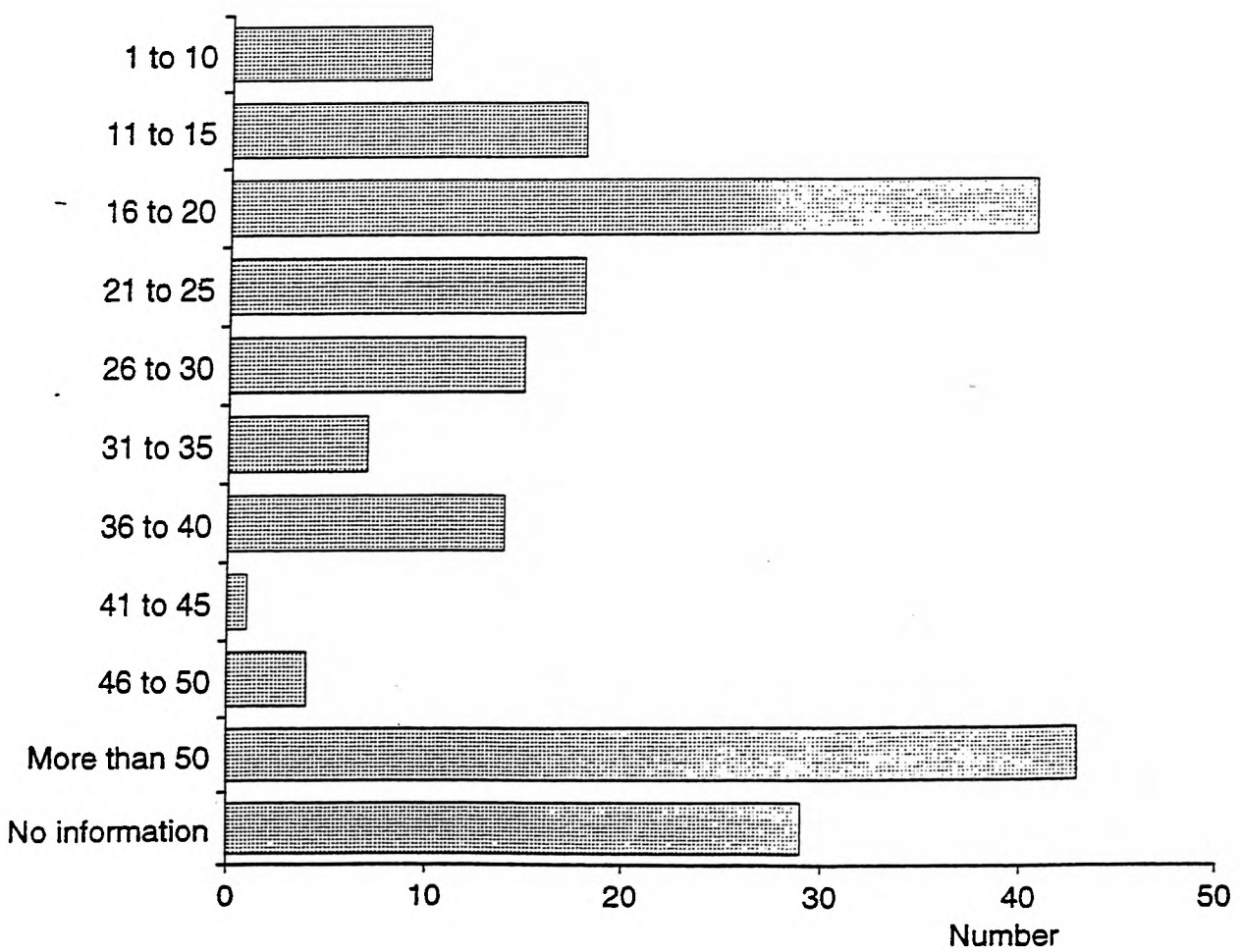


Medicine and nursing groups were included amongst the teachers in 41 initiatives. Medicine, nursing groups and social work were all involved as teachers in a further 34 initiatives. Nursing groups and social work were both included as teachers in 34 initiatives and two initiatives included medical and social work professionals as teachers.

The Participants

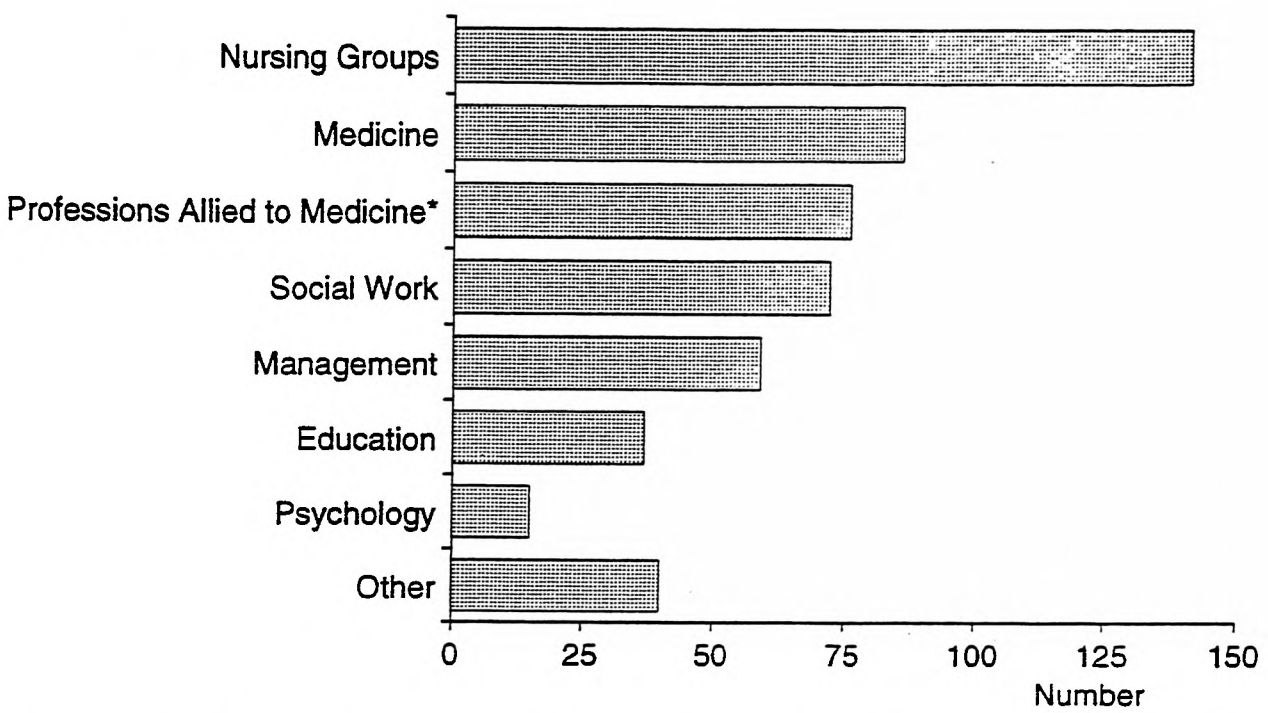
The total number of participants per initiative ranged from eight to over 50 (see Figure 6).

Figure 6 Number of Participants per Initiative



Nursing groups (e.g. community psychiatric nurses, district nurses, health visitors, mental handicap nurses and practice nurses) made up the largest category of participants, followed by medicine, professions allied to medicine, social work, management, education and psychology in that order (see Figure 7). "Other" included banking, counselling, clergy, dentistry, housing, police, reception, social security and voluntary sector, as well as service users.

Figure 7 Number of Initiatives including each Professional Group amongst its Participants



* Includes physiotherapy, occupational therapy, radiography, podiatry, chiropody etc.

Respondents were also asked to give the number of participants in their initiative from each profession. Some only ticked the box, in which case they have been recorded as having "some or one" in Table d (Appendix B, p 49).

Combinations of Participants

Between them, initiatives covered almost every conceivable health and social care profession (See breakdown in Appendix B, Table e, p 49). Some spread wider to include clergy, community educators, school teachers, police officers, counsellors and social security officers.

Comparing Professions of Teachers/Trainers and Participants

With the exception of nursing groups and professions allied to medicine, each profession was more likely to be included amongst teachers/trainers than amongst participants - markedly so for managers, educators and psychologists. The reverse was, however, also sometimes the case as the following example illustrates.

> *Organised by the University's Department of General Practice, the MSc in Primary Health and Community Care included community development workers, educators, health visitors, GPs, nursing groups, physiotherapists and social workers as participants. The teachers were health economists, health service managers and GPs.*

Curriculum Content

Each respondent was asked to rate on a three-point scale the extent to which the content of the initiative provided a common value, knowledge and/or practice base. Of the 190 replying to the question, just over four fifths said "a lot". None said "not at all".

Each was also asked to rate the extent to which the initiative addressed differences in value, knowledge and/or practice bases. Of the 186 replying, just over half said "a lot". Only six said "not at all".

As the following example shows, the process by which curricula were devised is complex, taking into account contributions from many groups, including participants and service managers.

> *Given that Mental Health Support Workers were a newly created resource, there were no precedents upon which to call in designing the mental health certificate course for them. Information necessary to devise the curriculum resided in the practitioners themselves. A cross-section of workers and line managers from a range of agencies in the region worked to develop the initiative over a period of six months.*
>
> *The notion of competence was supported although the emerging NVQ system was found to be of limited value. An analysis of tasks could not capture a creative practice model. Instead, core characteristics of practice and what constitutes a competent worker were identified by studying it over time.*

Learning Methods

Each respondent was asked to rate on a three point scale the extent to which teaching was didactic. Of the 179 replying, just under two thirds said "a little" and slightly over one fifth said "a lot".

188 replied to the question about the extent to which the learning methods were interactive between the professions. Of these, just over four fifths said "a lot". Only one said "not at all".

The following example shows how learning materials can be augmented by interactive learning in tutorial groups for participants from different professions and agencies.

> *The study programme for health and social services managers included ten workbooks, each representing between two and three weeks of study. These workbooks included many exercises and activities. Some of these were used in tutorial groups, enabling participants from one or more type of agency to work through management problems in the company of one another.*
>
> *Participants were also referred to recommended reading and to audio and video tapes. The reading was of three sorts: a resource book on developing communication skills, essential and optional reading reproduced from other texts, and set books. Videos sequences provided case material, while audio-cassettes amplified topics introduced in the workbooks.*

Practice-Based Learning Methods

The same question asked respondents to rate the extent to which the initiative included practice-based learning. Of the 164 who replied, just over two fifths said "a lot", just under a third said "a little" and a quarter said "not at all".

The following example illustrates ways in which students from different professions drew on their practice.

Assignments during the masters and diploma programme in Health Information Management gave each student an opportunity to understand and illustrate principles of good practice by undertaking a case study in the workplace. Examples of such studies included:

* *helping to develop the information and IT strategy for a Combined Purchasing Consortium, by a District Information Manager;*
* *a study of information needs to implement the Patient's Charter, by a Nurse Manager;*
* *an analysis of the use of the CD-ROM database in the Medical School, by a Medical Librarian;*
* *developing a method for studying information needs of a specialty in an acute hospital, by a Resource Management Project Manager.*

Dissertations for students proceeding to the masters degree also reflected workplace needs, but in broader terms. Examples included:

* *devising an information strategy for a Mental Health Unit;*
* *identifying information needs of managers in support of the contracting process in an NHS Trust;*
* *providing nursing informatics training in the UK;*
* *using a geographical information system within an urban community health service NHS trust;*
* *applying Total Quality Management to information management in general practice.*

Assessment

In over half the 200 initiatives participants' learning was formally assessed (see Table 4).

Respondents were asked about the means of assessment. Many initiatives included a mix. Dissertations, theses, portfolios and assignments were most frequently reported, followed by essays.

Respondents were also asked whether assessment was for each student individually or in groups. Nearly all were individual. Group assessments were most likely to be oral presentations or assignments.

Table 4 also shows the relative use of individual and group assessment when that part of the question was answered.

The number replying differed for each part of the question.

Table 4.

Means of Assessment

Method	No. of respondents replying from 200	Individual Work	Group Work
Essays	64	61	3
Assignments	72	60	12
Dissertations/theses/ portfolios	49	44	5
Observed practice	44	39	5
Oral presentations	59	34	25
Examinations	33	32	1

An example of an initiative which included a mix of assessment methods follows.

A variety of assessment methods had been chosen for the BSc in Health and Community Studies, which provided an entry into health and social care.

Examinations were minimal. Assessment strategies reflected the emphasis of the course upon the acquisition of core skills and competencies. They included the use of written, oral and poster presentations, plus portfolios and profiling. Presentations were either individual or in groups. The value of a variety of assessments was seen to allow students to demonstrate the integration of knowledge, skill, attitudes and competence learned from their studies.

Credit

In just over half the initiatives, participants' learning carried credit towards qualifications or awards. Some initiatives carried credit towards more than one qualification or award (see Table 5).

Table 5

Credit towards qualifications and awards

Qualification/Award	Number of Initiatives
Higher National Certificate	1
National Vocational Qualifications	1
First degrees	31
Continuing professional development	10
Practice teaching awards	3
Post-Graduate Certificates/Diplomas	45
Masters degrees	23
Other	7

Professional fields in which these credits were awarded included counselling, district nursing, health visiting, management, medicine, occupational therapy, radiography and social work.

Some respondents drew attention to credit accumulation systems that enabled participants to progress from one qualification to another. An example of this follows.

> *The distance learning programme in medical education was open to participants from a range of professions. An "Introductory Trends Unit" raised awareness of key issues in medical education. The Certificate provided an overview of those issues. The Diploma provided further study of key issues. The Masters Degree provided in-depth study of one aspect of medical education.*
>
> *The programme comprised units of study, each carrying two credits towards the total of 40 required for the Certificate and 80 for the Diploma. A further 40 credits were required to gain the Masters Degree.*

Validation

Two thirds of the initiatives were validated or approved. In some cases this was undertaken locally or regionally, for example, by a college or university, or by a post-qualifying consortium, or towards the Post-Graduate Education Allowance for General Practitioners. In others validation or approval was by national bodies including:

- the City and Guilds Institute of London;
- the Central Council for Education and Training in Social Work;
- the (former) Council for National Academic Awards;

- the Institute of Health Services Management;
- the National Boards for Nursing, Midwifery and Health Visiting;
- the Open University
- the Royal College of Nursing.

Joint or parallel validation had sometimes been obtained, as in the following example.

> *Based in a Research Centre, the course in learning disabilities had been validated by both the English National Board (ENB) and Central Council for Education and Training in Social Work (CCETSW), and the Diploma had been recognised by the University. In consequence, successful students were eligible for the award of the ENB 705 certificate and could claim credits towards the CCETSW advanced award, as well as gaining the University's Diploma. The course also enjoyed the support of three neighbouring health authorities and the local College of Nursing.*

Evaluation

Nearly all (nine tenths) of the respondents reported that their initiatives had been evaluated. In almost every case, organisers, teachers or trainers were involved, but nearly half also involved an independent person or organisation. Far fewer evaluations had been written up (just one quarter) and fewer still published.

Table 6 reports the areas covered by the evaluation. The number of respondents completing each part of the question is given.

Evaluation most frequently referred to participants' satisfaction, followed by the course process. However, over half of those replying (and over a third of all initiatives reported) said that they employed before and after measures of change in participants' attitudes or perception. Nearly as many took the views of people other than participants into account. 61 respondents reported that attempts had been made to evaluate observed impact on collaborative practice.

Table 6

Content of Evaluation

Aspect	Number replying	Yes	No
Participants' expressed benefits from/ satisfaction with the initiative	171	170	1
Planning, organising and/or running the initiative	163	154	9
Before and after measurements of change in participants' attitudes, perceptions or behaviour	142	78	64
Views of others about the merit of the initiative	130	74	56
Observed impact of learning on collaborative practice	133	61	72

Repeating Initiatives

Four fifths of the respondents said that there were plans to repeat the same initiative. Just over four fifths also said that other initiatives were being planned. Operationalising those plans would, however, be dependent upon organisational commitment being maintained following Health Service reorganisation, financial support continuing following changes in responsibilities for funding education and training, and participants being released by their employers.

Requirements for Further Developments

Many respondents answered the final question on the second questionaire which invited comments about the salient issues in interprofessional education. Most comments were on the need for shared learning to continue developing an increased understanding of the roles and responsibilities of different professions, while identifying and valuing the particular and separate contribution of each profession. Breaking down the myths, misunderstandings and inappropriate expectations between the professions were considered important aspects.

Organisational obstacles and profession specific systems were seen as significant barriers to developing interprofessional education. Respondents suggested that increased cooperation between statutory and professional bodies would facilitate developments. Funding and time for research and development were also needed.

Calls for the identification of common learning needs, knowledge and competency across professions and for greater user participation in and influence on interprofessional education were made in order to enhance collaboration, improve the quality of care and ensure coordination.

Problem based, interactive and experiential learning rather than shared lectures was advocated. So was making interprofessional education rather than sole profession or agency training the norm. Regular monitoring and evaluation were encouraged. It was suggested that introducing a training "ecu" between agencies would facilitate wider access to internal agency initiatives.

Suggestions for practical help and support included assistance with publishing reports and research; advice on appropriate timing and topics for shared learning; guidelines for frameworks; facilitating networking; regional initiatives and identifying key people to facilitate linking between professions.

Some respondents also noted the need for continued evaluation of interprofessional education and greater focus on the outcomes on practice of interprofessional education. Some sought guidance on methods.

The value of beginning interprofessional education early was mentioned, as was the need to make interprofessional education part of mainstream education and to support and develop the skills and confidence of the teachers and trainers providing interprofessional education.

DISCUSSION

The Purposes Revisited

The survey has provided an overview of the aims, form, methods and content of some of the interprofessional education taking place throughout the UK. It has gathered a considerable amount of interesting and illuminating information which provides some useful insights into the continuing development of interprofessional education.

The findings show that the pattern of interprofessional education seems to be becoming more complex, and the need to explore which forms of shared learning are most appropriate in which circumstances emerges from them. They provide a useful and rich starting point for more detailed investigation using a range of research methods into particular aspects of interprofessional education.

The data obtained are already proving invaluable in facilitating networking and cooperation between initiatives in neighbouring areas and in similar fields. The foundations have been laid for CAIPE's operational database, which is now being expanded and is already being accessed by its staff on behalf of members and interested others.

Not least, findings are being put to use to inform CAIPE's policies and priorities in promoting and developing interprofessional education, including the targeting of its information, advisory and educational services.

Estimating the Scale of Activity

The survey indicates the minimum number of interprofessional education initiatives that are being undertaken throughout the UK. 455 initiatives were reported, of which 200 were longer than two days. The wealth of supplementary material sent by respondents indicated that initiatives known to them substantially exceeded the number reported on the questionnaire, without making any allowance for non-respondents.

Unfortunately, given the response rate to the first questionnaire and the variety of forms in which information was provided, it was not possible to gauge what proportion of interprofessional education in the UK replies represented. Nor was it possible to indicate how representative the initiatives reported in this survey were.

Comparisons between the 1988/89 and the present survey would have provided, at best, crude indications of change in the location, form and incidence of interprofessional education, given the low response rate on this occasion.

Nevertheless, the data gathered provide important pointers.

Grounds for Encouragement

There is much in the findings to encourage people who are committed to the development of interprofessional education. Initiatives were identified in all parts of the UK. Commitment had been demonstrated across the spectrum of relevant bodies in education and practice, in health and social care, in statutory and voluntary sectors, and across the purchaser/provider split. Experience had been gained in jointly instigating and running initiatives, experience which bridged both health and social care, and education and practice.

Few contemporary issues in health and social care seemed to have escaped attention, while all the major professions were involved, and in almost every conceivable combination. Contrary to occasional criticism, the medical profession did take part and in substantial numbers, although usually in work-based learning relating to their own practices. Substantial participation by social workers held the promise to address issues of collaboration across the health and social care divide. Similarly, participation by managers held the promise to address issues across the managerial and professional divide.

Initiatives were more often than not assessed, enabling participants to claim credit towards academic and professional qualifications. They had also gained internal and external validation. Nearly all were said to have been evaluated. Interprofessional education had, it seemed, come in from the cold.

The number of reported initiatives which started since 1991 can be read as grounds for encouragement, but this does not necessarily represent an increase on previous years as other initiatives in earlier years may have been discontinued before the year under review.

Impressions gained from the present survey do, however, reflect those gained from the interviews undertaken for the Review of Shared Learning (Barr, 1994) and suggest that occasions when health and social care professions learn side- by-side have increased, and continue to increase. Information about initiatives that has come to the attention of CAIPE since the period covered by this survey also suggests that developments are continuing and new initiatives are planned.

Developments that reinforce these impressions include:

- the extension of modular systems into undergraduate and postgraduate professional education;
- the integration of studies across professions which may develop more easily as a number of different professional schools come into the same university;
- the creation of cross-disciplinary units within universities and colleges;
- the production of an increasing variety of open learning materials designed for a range of professions and their use in mixed professional groups;
- the preference of purchasers for education and training which responds to organisational rather than single profession needs;
- the inclusion of multiprofessional education as a priority for local consortia and Regional Education and Development Groups (NHS, 1995).

Although opportunities for health and social care professions to learn together seem to have been increasing steadily since the late eighties, the number aiming to promote collaborative practice and, to that end, facilitate participants' learning from and about one another, remains uncertain and is likely to be fewer. These are the ones which CAIPE most wants to locate in order to learn from their experience, to support their development and to encourage networking. CAIPE also has an interest in identifying those initiatives which hold the potential to promote collaborative practice so that it can advise and support them.

Common Principles

As the survey has shown, interprofessional education initiatives are wide ranging, varied, increasing and constantly evolving and developing. Nonetheless, they share common aspirations and principles (CAIPE, 1996). These principles can be summarised as follows. Effective interprofessional education:

- works to improve the quality of care
- focuses on the needs of service users and carers
- involves service users and carers
- promotes interprofessional collaboration
- encourages professions to learn with, from and about one another
- enhances practice within professions
- respects the integrity and contribution of each profession
- increases professional satisfaction.

SOME QUESTIONS FOR FUTURE INVESTIGATIONS

As this survey goes to print, a fresh wave of research into aspects of interprofessional education is getting under way, some supported by the Department of Health and some by the English National Board for Nursing, Midwifery and Health Visiting. In the light of the survey, questions on aspects of interprofessional education meriting investigation include the following.

Classification of Interprofessional Education

How can occasions when health and social care professions learn together be classified? Semantic problems would then need to be resolved.

Working jointly

What has been the experience of organisations jointly instigating and running initiatives? What have been the dividends? What have been the problems? How may they be avoided in the future?

Involving service Users

How have service users and their carers been involved, and to what effect?

Common and comparative curricula

How have curricula been constructed to meet participants' common, and comparative learning needs in relation to different levels/stages and lengths of initiatives?

Interactive learning methods

Which interactive learning methods have been chosen and why? Which have proved to be effective and how?

Practice-based learning

How have initiatives developed practice-based learning to include experience of collaborative practice?

Assessment

How has the assessment of participants' learning, including the assessment of group learning, been applied to collaborative practice? What criteria have been adopted and how have they been applied?

Validation

How have initiatives experienced internal and external validation? What lessons does this hold for planning initiatives, for validating bodies and for collaboration between them?

Evaluation

How have initiatives been evaluated, with particular reference to the relationship between purpose, content, process and outcomes, and their impact on professional practice and services from the perspective of users? What recommendations emerge for future approaches and methodologies?

Funding

What funding is available for interprofessional education and training, including joint funding?

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APPENDIX A.

THE METHODOLOGY REVIEWED

There are lessons to be learned about the peculiar difficulties of investigating interprofessional education to ensure that future research is as efficient and effective as possible.

The Sample

With the intention of comparing findings with those from the 1988/89 survey, essentially the same groups of personnel were approached in this survey (allowing for changes in designation and some additions to cover community care). The authors of the earlier survey took the view that approaching informed groups of personnel was most likely to maximise the number of initiatives reported, while calling upon help from people able to provide the necessary detail about them. Sampling of educational institutions was considered, but rejected (Shakespeare et al. 1989). Much the same arguments applied in planning the present survey.

The Questionnaires

Like all surveys using postal questionnaires, this one had to work within the limitations of the method. Hard choices had to be made about which questions to include and ways had to be found to reduce complex issues to manageable questions. On reflection, open-ended questions might have been better posed in interviews. However, interviews were not part of the brief and would have increased costs.

The Response Rate

A number of explanations may be posited to explain the limited response to the first questionnaire.

First, as more categories were added to the mailing list, so recipients were more likely to receive two or more copies. Where only one was returned, the others would have been counted amongst the non-respondents.

Second, some of those approached were unwilling to make multiple returns for a number of initiatives, while others may have seen little point in making a nil return if they had no initiatives to report (in spite of the request to return blanks).

Third, respondents were given a broad definition of interprofessional education and were left to decide for themselves whether, on the basis of that information, they knew about occasions when professions learned together.

Fourth, efforts to make the first questionnaire as short and simple as possible may have robbed it of content to capture attention and interest. The more thought-provoking questions were held back for the second questionnaire.

Fifth, it is possible that some non-respondents were reluctant to be included on CAIPE's database, and to allow even the most rudimentary information to be in the public domain.

Sixth, questionnaires went out at a time when health, social services and education were all in the midst of stressful change, and filling out questionnaires may not have been welcome.

How many more of the first questionnaires would have been answered if reminders had been sent can only be a matter for conjecture. Apologies were volunteered by some recipients who assured the researchers that it had been their intention to reply and that they would have done so with a reminder. The cost of dispatching about 2,000 additional copies did, however, exceed available funds. The issue was one of cost/benefit. With reluctance, and after consulting the Department of Health about the possibility of supplementary funding, it was decided to work with the returns received.

On a more positive note, the markedly higher response rate for the second questionnaire does identify a constituency willing to make time and take trouble to contribute their experience towards a wider understanding of interprofessional education. That augurs well for future research.

The Data

What confidence can be placed in the data? They describe a self-selected sample demonstrably willing to contribute to a wider understanding of interprofessional education. They are indicative, given the method by which initiatives were located and the limited response rate. Many readers will, however, be able to test them against their own experience, while future research projects may be able to provide harder evidence.

Where an organisation which is active in the field under investigation (such as CAIPE in this case) opts to conduct a survey itself, that is liable to influence who responds and what information they volunteer. The outcome may therefore be biassed.

Future Investigations

How then should research or surveys be conducted in future? That depends upon the bodies commissioning or undertaking them, and what questions and aspects they wish to explore.

Recent years have seen the establishment of two kinds of consortia, one involving education and service providers to support the development of pre- and post-qualifying social work education and training, and the other to plan and commission education and training for most non-medical health professions. Both have been called upon to consider and support interprofessional education (CCETSW, 1992; CCETSW, 1995; NHS Executive, 1995). Both will have to gather information about the need for, and provision of, interprofessional education, in order to inform the planning and provision of developments.

The Regional Education and Development Groups (REDGs)will need to collate that information and to undertake their own region wide enquiries. There would be many benefits to be gained from adopting similar approaches and formats across areas

and regions, as this would expedite preliminary work, reduce costs, enable comparisons to be made and, in time, build up a composite picture.

As the number of occasions when professions learn together continues to grow, all-embracing surveys at UK or national level become increasingly complex and costly. Persuasive arguments can, however, be advanced for more focused research, including surveys, to inform enquiries on behalf of central government departments, accrediting bodies, professional associations, academic bodies and other organisations into aspects of interprofessional education.

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Appendix B.

SUPPLEMENTARY TABLES

Table a. First Questionnaires Sent and Replies Received.

	Sent	Received	%
Health Service Trainers			
Facilitators in Primary Health Care	274	45	16.4
Trainers in Community-based Health Trusts	252	18	7.1
Joint Appointments			
Joint Trainers, Health/Social Services	22	7	31.8
Tutors of Joint Practice Teaching Initiatives ***	20	4	20.0
Medicine			
Undergraduate Medical School Deans	35	12	34.3
Postgraduate Medical School Deans	24	3	12.5
General Practice – Regional Advisers	29	8	27.6
General Practice Tutors	273	45	16.5
General Practice – Course Organisers	350	67	19.1
Nursing Groups			
Directors of Nurse Education	189	52	27.5
Directors of Courses in District Nursing and Health Visiting	60	19	31.7
Directors, Tutors and Teachers in Midwifery Education	129	31	24.0
Professions Allied to Medicine			
Course Organisers	162	45	27.8
Social Work			
Tutors of Qualifying Courses	135	25	18.5
Post Qualifying Coordinators	21	3	14.3
Training Officers in Social Services/ Work Departments	135	10	7.4
Voluntary Sector			
Members of the NCVCCO** Trainers Network	53	10	18.9
Other			
Trainers for Community Care *	83	15	18.1
Respondents to the Pilot Questionnaire	14	8	57.1
Teachers in Membership of CAIPE	138	37	26.8
Contacts provided by Journal/Bulletin Readers	100	45	45.0
Total:	**2,498**	**509**	**20.4**

* Taken from the CCETSW Community Care Database

** The National Council of Voluntary Child Care Organisations.

*** Pilot initiatives mounted for CCETSW, the ENB and the College of Occupational Therapists to prepare practice teachers.

Copies were also sent at the request of the Social Services Inspectorate to its 12 regional offices for information.

Table b. Titles of Initiatives

	Number	%
Life Stage		
Childbirth	8	1.8
Children	24	5.4
Ageing	13	2.9
Palliative care/terminal illness	3	.7
Chronic Illnesses	20	4.5
Community Care	48	10.7
Collaboration:		
Primary Health Care	41	9.2
General	33	7.4
Health Education and Promotion	45	10.1
Disabilities	16	3.6
Mental Health	18	4.0
Research	8	1.8
Health, Community and Welfare Studies	21	4.7
Counselling	22	4.9
Management:		
General	9	2.0
Audit	16	3.6
Information and Management Systems	4	.9
Education and Training		
General	14	3.1
Continuing	20	4.5
Ethics	4	.9
Professions Allied to Medicine	8	1.7
Other	25	5.6
Not Specified/Not Known	35	7.7
Total	455	

Table c. Reasons for Launching Initiatives

	Ranked top		Ranked 1 to 5	
1. Enlarging markets /ensuring viable numbers	12	8.2%	39	26.%
2. Meeting common needs across professions	60	34.5%	150	86.2%
3. Learning from/about each other	1	.6%	132	69.1%
4. Widening choice of studies	5	3.6%	54	38.6%
5. Integrating /coordinating services	12	8.4%	78	54.6%
6. Promoting teamwork	11	7.5%	94	63.8%
7. Responding to new/changing problems	24	15.7%	111	72.5%
8. Creating a flexible/transferable workforce	5	3.9%	48	37.7%
9. Implementing health/social policies	8	5.7%	65	46.4%
10. Implementing educational policies	6	4.5%	49	36.9%

Table d. Number of Participants from Each Profession

	Some/one	2–5	6–10	11–15	16–20	21+
Education	20	11	4	–	–	2
Management	25	17	7	7	1	2
Medicine	25	25	19	4	5	8
Nursing Groups	39	23	32	13	8	27
Professions Allied to Medicine	33	22	7	–	–	14
Psychology	12	2	–	–	1	–
Social Work	25	16	13	8	1	9
Others	16	10	3	3	1	6

Table e. Combination of participants by type of initiative

Combination of participants for courses not leading to an award included the following:

- practice managers, practice nurses and receptionists;
- general practitioners and nurses;
- audit staff, clinical tutors, FHSA trainers, GP course organisers and practice managers;
- day care workers, physiotherapists and social workers;
- midwives and nurses;
- general practitioners, health visitors, managers and nurses;
- clergy, medics, nurses and social workers.

Combinations of participants for courses leading to awards or registration included the following:

for Registration/Post Registration:

- district nurses, general practitioners and health visitors;
- general practitioners and health visitors;
- occupational health nurses, occupational health and safety officers and occupational hygienists.

for Diplomas:

- midwives and nurses;
- district nurses and health visitors.

for Diplomas/Professional Registration:

- general practitioners and practice nurses;
- general practitioners and health visitors.

for First Degrees:

- community health workers, nurses and social workers;
- occupational therapists and physiotherapists;
- dentists, orthoptists and speech therapists;

- orthoptists, prosthetists and physiotherapists;
- nurses, occupational therapists and radiographers;
- podiatrists and radiographers;
- health care workers, health visitors, midwives and nurses.

for First Degrees/Diplomas:

- occupational therapists and social workers;
- occupational therapists, physiotherapists and social workers;
- dietitians, nurses, occupational therapists, physiotherapists, podiatrists, radiographers and speech therapists;
- midwives, nurses and radiographers;
- community educators, primary teachers and social workers.

for Practice Teaching Awards:

- social work practice teachers and community nursing practice teachers;
- community health care nurses, occupational therapists and social workers.

for First/Masters Degrees:

- nursery nurses, nursery teachers and social workers.

for Masters Degrees:

- midwives, nurses and social workers;
- dietitians, environmental health officers, nurses, physiotherapists, radiographers and speech therapists.

for Registration/Post Registration/Masters Degrees:

- general practitioners, health visitors and social workers.

APPENDIX C.

CAIPE'S Database

CAIPE now has a database of initiatives in interprofessional education and training, incorporating selected information from each reply to this survey and material drawn to its attention subsequently. It is being revised and augmented regularly.

The object is to provide a dependable, up-to-date and systematic source from which to disseminate information, to facilitate networking and to provide pointers for good practice.

The following table summarises some examples from this survey which are on the database. Each entry records the name of organisation responsible for the initiative (made anonymous on this occasion), the region in which it took place (not given here) the level, the title, length, year first held and mix of professions amongst participants, and address of contact person (not given here).

Example	Type of organisation/organiser	Level	Title	Length	Year begun	Mix of professions amongst participants
1	A department of general practice in a university	Post-qualifying or continuing professional development	MSc in Primary and Community Care	1 year	1991	Community Development, Medicine, Nursing, Physiotherapy, Social Work
2	A training manager in an institute based in a university	Post-qualifying or continuing professional development	Modules in continuing education programme	6–21 days	1989	Clinical Psychology, Domiciliary Care, General Practice, Hearing Therapy, Law, Nursing, Ocupational Therapy, Physiotherapy, Residential Care, Social Work
3	A college of health in collaboration with a social services department	Post-qualifying or continuing professional development	Child protection training - multiprofessional teamwork -	2–5 days	1992	Education, Medicine, Nursing, NSPCC, Police, PAMs, Social Work
4	A school of health care in a university	Post-qualifying or continuing professional development	Local Multidisciplinary Facilitation Team Course	22-60 days	1994	General Practice, Nursing, Practice Management, Reception
5	An institute of health and community services	Post-qualifying or continuing professional development	BSc Health & Social Studies	3 years	1994	General Practice, Management in Health Social Work, Nursing, Social Work
6	A social services training department	Basic professional education/ training	Joint Foundation for Community Care	6-21 days	1994	Health, Housing, Medicine, Social Service
7	A school of cultural and community studies	Basic professional education/ training and post-qualifying or continuing professional development	Helping Professions Workshop	2-5 days	1980	Health Visiting, General Practice, Social Work

UK CENTRE FOR THE ADVANCEMENT OF INTERPROFESSIONAL EDUCATION

Survey of Interprofessional Education and Training

In 1988 CAIPE commissioned the Institute for Community Studies to undertake a survey of interprofessional education in primary health care in Great Britain. The report proved invaluable as a guide to future action. However, much has happened since then, which makes the need for an up-to-date picture pressing. That has been made possible by a grant from the Department of Health.

The Survey

While the present survey builds on the earlier one, it goes further. It covers all initiatives where community based health and social care professionals learn together throughout all parts of the United Kingdom. It has taken advantage of findings from a `Review of Shared Learning' undertaken by the School of Social Studies at the University of Nottingham on behalf of CAIPE.

Aims

The survey has been designed to:

- provide an up-to-date overview of interprofessional education and training
- facilitate networking
- provide a database accessible to CAIPE's members and interested others
- inform CAIPE's future policies and priorities
- enable CAIPE to target its services

Boundaries and Definition

This survey covers "initiatives" that are primarily educational e.g.conferences, courses, seminars, workshops, open and distance learning, and guided work-based learning completed between **1/10/93 and 30/9/94:**

- where two or more health and/or social care professions learn together;
- during basic or continuing education and training;
- whether in the workplace, college or university, or elsewhere;
- whatever the duration;
- in any part of the United Kingdom;
- in respect of any service based in the community;
- without restriction in terms of types of service user

Locating Initiatives

Help in locating such initiatives is being sought from directors of nurse education, teachers of midwifery, course organisers for nursing, health visiting and social work, training officers in social services/social work departments, undergraduate deans in medical schools, regional advisers, course organisers and tutors in general practice, UK readers of the Journal of Interprofessional Care and CAIPE members. Other offers of help in locating initiatives will be much appreciated.

Methods
A copy of a short postal questionnaire is being sent to all known and identified initiatives. A questionnaire should be filled out for each initiative run. Please ensure that it is given to the person responsible for each initiative. Further copies of this questionnaire will be provided on request.

Where an initiative lasted two days or longer we shall be sending a supplementary questionnaire.

In return for their help, all respondents can choose to receive a summary of the main findings and to purchase the report at a discount.

Uses of Data
Basic information regarding topic, location, duration, participant groups and organisations responsible will be recorded on CAIPE's operational database to assist in response to enquiries. All other information will be analysed exclusively for the published report without reference to the initiative by name.

Personnel
The survey is being directed by Hugh Barr (working one day per week) and administered by Sarah Waterton in the CAIPE office. The Steering Group comprises Dr John Horder, Margaret Thwaites, Lonica Vanclay (CAIPE's Director) and Jenny Weinstein.

Please address any queries to Professor Hugh Barr, Survey Director, at CAIPE, 344 Gray's Inn Road, London WC1X 8BP or telephone Sarah Waterton, Research Assistant on 071 278 1083.

INTERPROFESSIONAL EDUCATION AND TRAINING IN PRIMARY HEALTH AND COMMUNITY CARE

A NATIONAL SURVEY

Code No:.....

This aim of this survey is to find out about the extent and nature of interprofessional education and training for primary health and community care professionals that took place between **1st OCTOBER 1993 AND 30th SEPTEMBER 1994**.

It is financed by the Department of Health and conducted by CAIPE (the UK Centre for the Advancement of Interprofessional Education). It will serve as a general information resource and will help inform CAIPE's work in encouraging and supporting those involved in interprofessional education.

Note - throughout the questionnaire we use the words:

participants to mean *workers/students;*
teachers/trainers also to mean *tutors, consultants, facilitators* and *mentors;*
service users to mean *patients and/or clients*

Please fill in one copy of this questionnaire for each initiative organised. In the case of modular initiatives it would clearly be asking too much of you to fill in separate questionnaires for each module; therefore please complete only one questionnaire for each modularised scheme of study.

Your name.....

Position.....

Organisation (abbrev.& in full).....

.....

Address.....

.....

Postcode.....Telephone.....

---

1. **Title or topic of the initiative:**.....

.....

2. **Was the initiative during**
(please tick one only)

Basic professional education/training? ☐

Post-qualifying studies or continuing professional development? ☐

Other (*please specify*) ..... ☐

.....

3. **Which organisation(s) <u>instigated</u> the initiative?**

.....

.....

4. **Which organisation(s) <u>ran</u> the initiative?**

.....

.....

5. **In what town/city etc.was the initiative held?**

.....

6. **Was it held:**
(please tick one or more)

in the workplace? ☐

in an employer`s training centre? ☐

in a college or university? ☐

in a hotel or conference centre? ☐

elsewhere? (*please specify*) ..... ☐

.....

7. **How long, in total, did the initiative last?**

(If sessional, please estimate the total in whole day equivalents, based upon 6 hours per day)

Less than one day ☐
One day ☐
2-5 days ☐
6-21 days ☐
22-60 days ☐
More than 60 days ☐
(Please specify).....

8. **In what year did essentially the same initiative first take place?**
(write in year) 19.....

9. **Did the initiative's participants include more than one profession?**

Yes ☐
No ☐

If so, which?.....

.....

.....

10. **Please help us to find other examples of interprofessional education and training by giving us details of as many as are known to you.**

Title/Topic.....

Organisation.....

Contact person's name and address

.....

.....

.....Tel.....

(please continue on a separate sheet with any other initiatives)

11. **If you would like to receive a free summary of the main findings of the survey please tick here** ☐

THE TROUBLE YOU HAVE TAKEN IN COMPLETING THIS QUESTIONNAIRE IS MUCH APPRECIATED

Please return in the stamped addressed envelope provided to: Sarah Waterton, Research Assistant,CAIPE, 344-354 Gray's Inn Road, London WC1X 8BP

Copies of prospectuses, papers and reports which refer to the above initiative would be much appreciated, both to inform the survey and for CAIPE to retain for future reference.

INTERPROFESSIONAL EDUCATION AND TRAINING IN PRIMARY HEALTH AND COMMUNITY CARE

A NATIONAL SURVEY:SUPPLEMENTARY QUESTIONNAIRE

Code No:.....

Your name:

.....

1. **Title or topic of the initiative:**

   .....

   .....

2. **Did the initiative constitute the complete learning for the participants?**

   Yes ☐

   No ☐

3. **Did the inititiative constitute part of the learning for the participants (within their separate professional courses)?**

   Yes ☐

   No ☐

If you replied yes to 3 please name each course from which participants came.

Course

.....

.....

.....

.....

.....

4. **Please mark the following from 1 to 10 in rank order indicating the extent to which they influenced the decision to launch this initiative?** *(Marking the most important 1 and the least important 10)*

Enlarging markets/ensuring viable numbers ☐

Meeting common learning needs across professions ☐

Enabling professions to learn from and about each other ☐

Widening choice of studies available to each profession ☐

Integrating and coordinating services to users ☐

Promoting teamwork ☐

Responding to new/changing health/social problems ☐

Creating a flexible and/or transferable workforce ☐

Implementing health/and or social policies ☐

Implementing educational policies ☐

Other (*please specify*) ☐

.....

.....

Please add any comments

.....

.....

5. **Was the initiative:**
(please tick one)

a single block of study? ☐

intermittent study spread over a period of time? ☐

modular? ☐

6. **Was the initiative:**
(please tick one)

residential? ☐

non-residential? ☐

both? ☐

7. **How many times between 1/10/93 and 30/9/94 did it run?**

Once ☐

Twice ☐

Three times ☐

Four or more times ☐

More times ☐
(please indicate).....

8. **How many teachers/trainers were there?** (*Please include sessional contributors*) .....

9. **Between the teacher/trainer(s) which of the following professions/disciplines were represented?** (*Please tick all that apply and write alongside the particular branch of that profession/discipline*)

PROFESSION/DISCIPLINE	**BRANCH**	
Medicine	.....	☐
	.....	
Nursing Groups	.....	☐
	.....	
Social Work	.....	☐
	.....	
Professions Allied to Medicine*.....		☐
	.....	
Management	.....	☐
	.....	
Education	.....	☐
Psychology	.....	☐
Health Sciences	.....	☐
Sociology/Social Policy	.....	☐
Other (*please write in*)	.....	☐
.....	.....	

*Includes physiotherapy, occupational therapy, radiography, podiatry, chiropody, etc.

10. **How many participants were there?** .....

11. **Between the participants which of the following professions were represented?** *(please tick all that apply and write alongside the particular branch of that profession and the number of students from each)*

PROFESSION	BRANCH	NUMBER
Medicine	.....	☐
	.....	
Nursing Groups	.....	☐
	.....	
Social Work	.....	☐
	.....	
Professions Allied to Medicine*	.....	☐
	.....	
Management	.....	☐
	.....	
Education	.....	☐
Psychology	.....	☐
Other(*please write in*)	.....	☐

*Includes physiotherapy, occupational therapy, radiography, podiatry, chiropody,etc.

12. To what extent did the content of the initiative:

	a lot	a little	not at all
Provide a common value/ knowledge/ practice base for the professions represented?			
Address differences in value/ knowledge/ practice bases between the professions represented?			

Any comments?.....

13. To what extent did methods used during the initiative include:

	a lot	a little	not at all
didactic teaching?			
interactive learning between the professions represented?			
practice based learning?			

Any comments?.....

14. Was participants' learning formally assessed?

Yes ☐

No ☐

15. By what means?

	Individually	**In groups**
examinations	☐	☐
essays	☐	☐
dissertations/theses	☐	☐
portfolios		
observed practice	☐	☐
assignments	☐	☐
oral presentations	☐	☐

other (please write in).....

16. **Did participants' learning lead to, or carry credit towards, a qualification or an award?**

Yes ☐

No ☐

If yes, which qualification(s) or award(s)?

.....

.....

17. **Was the initiative validated or approved?**

Yes ☐

No ☐

18. **If yes, by which body or bodies?**

.....

.....

19. **Was the initiative evaluated?**

Yes ☐

No ☐

20. **If yes, by whom?**

	Yes	No
The organiser(s) or teachers/trainers?	☐	☐
Independent person(s) or organisation?	☐	☐

21. Which of the following did the evaluation cover:

	Yes	No
- the planning, organising and/or running of the initiative?	☐	☐
- before and after measurement of change in participants' attitudes, perceptions or behaviour?	☐	☐
- observed impact of learning on collaborative practice?	☐	☐
- participants' expressed benefits from/satisfaction with the initiative?	☐	☐
- views of others about the merits of the initiative?	☐	☐

please specify.....

.....

22. Has the evaluation been written up?

Yes ☐

No ☐

23. If yes, please give details below

Author .....

Title.....

Date.....

Publisher or source.....

.....

24. **Does your organisation have plans to:**
(please answer each question)

	Yes	No
...repeat the same initiative?	☐	☐
...run a modified initiative or initiatives?	☐	☐
...run (an)other interprofessional initiative(s)	☐	☐

If you have answered "yes" to one or more of these questions please give further details below.....

.....

.....

.....

.....

.....

25. **What further points would you like to add about the initiative?**

.....

.....

.....

.....

.....

26. **What for you are the salient issues in interprofessional education with which CAIPE should be concerned?**

.....

.....

.....

.....

.....

.....

THE TROUBLE YOU HAVE TAKEN TO COMPLETE THIS ADDITIONAL QUESTIONNAIRE IS MUCH APPRECIATED

Please return this questionnaire in the stamped addressed envelope provided to:

Sarah Waterton
Research Assistant
CAIPE
344-354 Gray's Inn Road
London WC1X 8BP Tel: 071 278 1083

Copies of prospectuses, papers and reports which refer to the above initiative would be much appreciated, both to inform the survey and for CAIPE to retain for future reference.

Paper A5

New NHS, new collaboration, new agenda for education

Journal of Interprofessional Care Vol. 14 (1)

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New NHS, new collaboration, new agenda for education

HUGH BARR

University of Westminster, UK

Summary *Since its election in 1997, the UK Labour Government has called for collaboration on an unprecedented scale throughout the public sector. This paper focuses upon collaboration in and surrounding the National Health Service (NHS), with reference to implications for higher education. It urges universities to enter into the new spirit of partnership with one another and with the NHS. The paper is based upon my inaugural lecture delivered on 13 April 1999 as a Visiting Professor at the University of Greenwich, UK.*

Key words: *collaboration; integrated care; interprofessional education; partnership.*

New collaboration

In the words of Tony Blair, the new NHS is finding 'the third way' [1] based upon partnership and driven by performance, which will replace the inequities and inefficiencies of internal markets by integrated care (Blair, 1997). No longer will patients be passed from pillar to post between agencies with competing agendas. Co-operation will replace competition. The new NHS will 'work as one'. It will break down organisational barriers and counter fragmentation of services. As the NHS forges new working relationships locally with education, employment, housing and social care services, government will work across Whitehall to bring about lasting improvements in health (Secretary of State for Health, 1997).

Collaboration is taking hold. Health Improvement Programmes are involving all those who are charged with the planning and provision of services. The 'Berlin wall' is coming down as partnerships are established between health and social services. Primary Care Groups are promoting the health of their local populations by working across practices and providing forums for professional development and peer review. Health Action Zones have started to 'release energy and innovation' as they bring together health organisations, local authorities, community groups, the voluntary sector and local business within 'a whole systems approach' to develop and implement locally agreed strategies to improve the health of local people. Systems for clinical governance are being put in place to build single, coherent, local programmes for quality improvement. All this is contributing to a strategy for a healthier nation based upon improving the environment, changing lifestyles, tackling unemployment, improving housing, integrating transport, cleaning up water, confronting crime, reforming

Correspondence to: Professor Hugh Barr, Centre for Community Care & Primary Health, University of Westminster, 115 New Cavendish Street, London W1M 8JS, UK. Tel: + 44 (0) 171 911 5039. Fax: + 44 (0) 171 911 5028. E-mail: barrh@westminster.ac.uk

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education and encouraging sport (Department of Health, 1998a–f; Secretary of State for Health, 1997).

However, can competition woven into the fabric of the 'old' NHS by the Conservative Government be so easily unpicked? Collaboration and competition will surely co-exist in the new NHS as they did in the old. New rivalries will replace old for reform generates its own tension, as power shifts between agencies and between professions, as boundaries are redrawn and as responsibilities are reassigned, not least with the advent of primary care groups. Or has the tide turned so decisively that collaboration will sweep aside all resistance? In that case, we shall do well to heed Hudson's warning against the dangers of 'over-collaboration' that can become over-complex and over-costly, raising unrealistic expectations with correspondingly low attainments as collaboration fatigue sets in (Hudson, 1999).

It is too soon to judge whether collaboration will replace competition, or merely substitute one kind of competition for another. It is too soon to judge when and where new tensions will be generated and how they will be resolved. It is too soon to judge whether new systems will be more efficient and deliver promised savings by cutting out bureaucracy, or merely replace one kind of bureaucracy by another that is no less costly. It is too soon to judge how rhetoric will be turned into reality. The jury is out.

New agenda for education

The new NHS, we are told, will work together towards common ownership of a common agenda to secure a quality workforce by 'networking' with 'key stakeholders' in the 'human resources community', including employers, unions and professions. 'Educational bodies' will, we are assured, be included in the development of an infrastructure for continuing professional developments (CPD), while 'academics' will also serve on the 'Partners' Council' of NICE (the National Institute for Clinical Effectiveness) (Department of Health, 1998b).

In his seminal report on CPD in primary care Sir Kenneth Calman, the then Chief Medical Officer (CMO), called for 'Practice Professional Development Plans' to develop the whole practice as a human resource for health care. These should encourage team working and facilitate appropriate adaptability of professional roles taking into account both uni-professional and multiprofessional learning needs. The philosophy of learning and working together could and should, said the CMO, be applied to primary care groups (Department of Health, 1998g), a view reinforced by proposals from Wilson et al (1998) to put education and training centre stage in developing primary care groups (PCGs). Drawing upon the findings of two Delphi surveys, they document tasks that PCGs are required to perform and the necessary knowledge and skills, including improving relationships through team working, team building, understanding the roles of others and resolving conflict.

Recent guidance from the NHS Executive (Department of Health, 1999a) offers a long-term vision for CPD that entails the cultivation of a learning environment in every health organisation to support lifelong learning within the framework of clinical governance. Higher and further education are included with Government, NHS employers, the health professions and regulatory bodies as partners to ensure that CPD becomes more effective.

CPD, the circular insists, is 'much more than going on courses'. Work-based learning should be at its heart, drawing upon the results of clinical audit, experience gained through effecting service improvements, access to information systems and research findings and reflections on team experience. Education consortia and postgraduate deans of general practice are called upon to lead local discussions with education providers 'about creating service/education partnerships to deliver flexible, modular education and training, with students studying in the workplace and at home, as well as in the classroom'. Workers should

also have the chance to take small steps in combinations of learning that suit them best and accorded academic credit for work-based and prior experiential learning by educational providers.

Opportunities for 'multidisciplinary and team-based learning' should increase and scope for shared learning across health and social care explored. This is reinforced by the Social Services Training Support Programme for 1999/2000 that accords priority to multidisciplinary and inter-agency training for health and social care groups to foster a common appreciation of respective roles and better working relationships in the interests of service users (Department of Health, 1999b).

Implications for the universities

There is much here that is power to the elbows of those in universities, as well as practice, who have laboured long to assert (or reassert) the value of work-based learning. Universities accustomed to working closely with industry (including the health industry) should have no difficulty in responding. Accreditation of prior experiential learning and work-based learning is increasingly common and many universities are breaking down modular programmes into smaller units that students can take as credit-bearing short courses. A new generation of university managers is well geared to embrace this new agenda for education; but universities also need to be alive to potential dangers if basic professional education is excluded from that agenda, if CPD is interpreted too narrowly and if interprofessional education is embraced without adequate preparation.

Implications for basic professional education

Reference to basic professional education is conspicuous by its absence from departmental guidance as if it is best left to universities, the professions and validating bodies; yet to exclude it from discussion detracts from efforts to make pre-qualifying courses more relevant to contemporary practice, to forge partnerships with employers and to construct a continuum of education and training in which basic professional education lays the foundations upon which CPD builds. A reforming government may rightly judge that CPD has more immediate impact upon practice than basic professional education and should therefore be accorded priority, but basic professional education must surely be built into the equation.

Implications for continuing professional development

CPD will, in future, be taken in smaller and smaller bites. The advantages lie in relating particular learning opportunities to immediate developmental needs, be they individual or organisational. The disadvantages lie in fragmenting learning, in denying workers opportunities for sustained study that allows them time to stand back, to analyse, to compare, to reflect, to criticise, to grow and to find new bearings, over months or years rather than days or weeks. Arguably, all professionals ought to be entitled to at least one such opportunity during their careers. At the very least, some need such opportunities to join a cadre of future leaders for the services and the professions. Official support for this proposition seems to be lacking.

Post-qualifying courses are too often treated as privileges for the fortunate few, a trend that the departmental guidance could reinforce. Some students are willing and able to finance themselves to pursue personal interests, to prepare for switches in their careers or to improve promotion prospects. Some take a break from employment. Others negotiate to go part-time, absorbing the loss of income as well as covering their university fees. It may be unreasonable to expect employers individually to pay for such opportunities, but ought they not collectively

to accept responsibility to prepare the leaders of tomorrow? Meanwhile, many post-qualifying courses run on low numbers and some go under. Viability depends upon devising patterns of study that offer both incremental learning for the many and continuous learning for the few. It depends too upon combining part-time and full-time pathways to cater, respectively, for students released by their employers and taking time out.

Implications for course design could hardly be more complex made more so by calls for collaboration. The days when each university designs its own CPD programmes in isolation are numbered. The new spirit of collaboration carries implications for partnership between universities and with employers, a spirit that has so far passed universities by. For they remain locked in competition to improve their relative research and teaching ratings in response to systems required ironically by the same government that is so intent upon promoting collaboration.

Is it realistic to try to draw universities into the new collaboration, or is competition too deeply ingrained? Consortia and postgraduate deans may conclude that it is less fraught to do business with universities separately; yet nowhere is rationalisation needed more urgently, to build on the strengths of each university, to eliminate wasteful duplication, to ease progression from one study opportunity to another offered by different universities and to establish a viable and streamlined system. Achieving this depends upon readiness to surrender academic autonomy, to concede territory and to compromise. Universities can either wait upon events or instigate this process themselves. Either way they need to be clear about the objective—to win contracts from the NHS or to work with it to draw up strategic plans for CPD in the longer term. The difference is fundamental.

Implications for interprofessional education

Interprofessional education has come in from the cold. From now on its claims will be tested as never before. Standards will be of the essence. As an instrument of clinical governance, it will be expected not only to help raise them but also to apply them to itself. Within higher education too it can expect to come under closer scrutiny during internal and external validation and subject reviews.

It may be called upon to cultivate collaboration in wider and unfamiliar fields–Primary care Groups, Health Improvements Programmes, Health Action Zones and across the fault lines between health and social services. If so, it will need to widen its knowledge base and extend its repertoire of learning methods by calling upon help from additional academic disciplines, notably management studies. Only then will it be able to engage credibly with the magnitude and complexity of the organisational issues.

Exponents of interprofessional education will come under pressure to provide a coherent rationale to demonstrate how its content and learning methods can cultivate collaboration. A grand theory of interprofessional education is still a long way off (and perhaps inappropriate in a field that celebrates difference), but there is a growing understanding of its many different forms and what they can deliver (Barr, 1996).

Departmental guidance focuses upon work-based learning, which is also attracting increasing attention in interprofessional education. Fashionable though the notion of the learning organisation is becoming, it is as yet insufficiently understood to underpin strategies for work-based interprofessional learning. More progress is, however, being made in understanding how learning occurs, for example, in teams and through multidisciplinary audit and continuous quality improvement, which is the theme for the next issue of this *Journal.*

From now on, exponents must expect to come under pressure to produce evidence to substantiate claims made for interprofessional education. In the age of evidence-based practice, demands are growing for evidence-based education (Hargreaves, 1996). Arguments

that interprofessional education cultivates collaboration may no longer be taken on trust. Some interprofessional programmes have been evaluated, although few in the UK (Barr & Shaw, 1995; Barr *et al.*, 1999a).

Work is in hand to review such evaluations, based upon two systematic searches of databases by the Interprofessional Education Joint Evaluation Team (JET) [2] for examples meeting rigorous requirements. The first, under the auspices of Cochrane Collaboration has been completed. It was confined to quantitative evaluations of interprofessional education satisfying closely defined criteria regarding research methodology and outcomes measured [3]. It found none. (Barr *et al.*, 1999b; Zwarenstein *et al.*, 1999). The second takes into account a wider range of research methodologies—qualitative as well as quantitative—and a continuum of outcomes. Preliminary findings suggest that, while university-based programmes can change attitudes and build the knowledge base for collaboration, work-based programmes (provided that they last not less than two weeks or its equivalent) can change organisational practice and benefit patients directly (Koppel *et al.*, in preparation).

Universities should therefore be careful not to claim more than they can deliver, but to conclude that the only effective interprofessional education is work-based would be simplistic. Different types of interprofessional education may lead to different outcomes—changing attitudes, heightening motivation, reinforcing collaborative competence, modifying individual and/or organisational behaviour in ways that may be mutually reinforcing in benefiting patients. That is the proposition that JET is testing in its second review.

Informed opinion believes that interprofessional education is more effective in cultivating collaboration when interactive learning methods enable participants to learn from and about one another (Barr, 1994, 1996). It remains to be seen whether JET, based upon the sources that it is using, will be in a position to substantiate or refute those claims.

While bending our energies to respond to this new agenda, we need to guard against the dangers of being caught up in a rising tide of support for interprofessional at the expense of professional education. Each of us has an obligation to our own profession to ensure that CPD is available to enhance its particular knowledge and skills in its particular areas of expertise. Lose sight of that and the interprofessional cause loses credibility.

Welcome though official support for interprofessional education is, much remains to be done to underpin action by experience and evidence, to integrate professional and interprofessional continuing development and to include it within a continuum of education and training for the health and social care professions.

Notes

[1] Readers struggling to understand this concept are referred to: Anthony Gidden's *The third way: The renewal of democracy*, published by Polity Press in 1998.

[2] JET comprises researchers from City, Oxford Brookes and Westminster universities. Inquiries about it should be addressed to the author at the address given on the first page of this article.

[3] As agreed with Cochrane Collaboration, evaluations included in the review had to comprise randomised controlled trials, controlled before and after studies or interrupted time series studies and measure outcomes relating to changes in the delivery of services and/or benefit to patients.

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Paper A6

Chapter 2

The Policy Framework

In:
Piloting interprofessional education
Four English case studies

H. Barr (ed)

London

Higher Education Academy
Health Science and Practice Subject Centre

2. The Policy Framework

Hugh Barr

The turn of the Century was a watershed for IPE in the England and indeed throughout the United Kingdom (UK) as 'initiatives', which had until then been for the most part isolated, ephemeral and marginal, moved into the mainstream of professional education in response to the lead given by Government. The UK administration elected in 1997 had immediately signalled its intentions to put training and education at the centre of its workforce strategy to help in improving health care. Integrated care for patients would rely on models of training and education that gave staff a clear understanding of how their own roles fitted with those of others within both health and social care professions. This accorded closely with established expectations of interprofessional education, but stopped short of making explicit reference (Secretary of State for Health, 1997).

A subsequent report put the emphasis on continuing professional development (CPD). Health professions in all health settings would need the support of lifelong learning through CPD programmes, whilst local health service employers would need to recognise the value of such programmes in an increasingly competitive labour market in attracting, motivating and retaining high calibre professionals, managers and other health care workers. Higher education providers and local education consortia (succeeded later by Workforce Development Confederations) would have key roles to play in the development of CPD, including innovative approaches to work based learning. CPD programmes would need to reconcile two objectives, matching the legitimate aspirations of individual health professionals with the needs and expectations of services and patients (Department of Health, 1998a).

The Chief Medical Officer for England (Department of Health, 1998b) put forward proposals for "practice professional development plans" (PPDP) in primary care. These plans, he said, should take into account both "uni-professional" and "multi-professional" learning needs to encourage team working, facilitate appropriate adaptability of professional roles and develop the whole primary care practice as a human resource for health care, thereby introducing IPE in all but name into the Department's case for CPD.

Proposals for radical reforms came in the subsequent NHS Plan (Secretary of State for Health, 2000), which emphasised the importance of collaboration between the NHS, higher education providers and regulatory bodies to make not only post-basic but also basic training programmes more flexible. They challenged, by implication, conventional wisdom that interprofessional learning was best left until practising professionals had found their respective identities and had experience under their belts to share, and called for a new core curriculum to promote partnership at all levels to ensure a seamless service of patient centred care. That curriculum would include joint training across professions in communications skills and in NHS principles and organisation delivered by new common foundation programmes to give everyone working in the NHS the skills and knowledge to respond effectively to patients' individual needs.

The programmes would promote:

- Teamwork
- Partnership and collaboration between professions, between organisations and with patients
- Skill mix and flexible working between professions
- Opportunities to switch training pathways to expedite career progression
- New types of workers

Educational reforms would back up Government's intent to give front-line staff with patients the opportunity to think and work differently to solve old problems in new ways and to deliver the improvements set out in the NHS plan. But education alone could not achieve these goals as Government recognised; they depended also upon a change in organisational culture by reducing hierarchies and developing self-managed teams (Department of Health 2001a).

Successive reports reinforced the message. In future, all health professionals should expect their education and training to include common learning with other professions at every stage. All universities should put "multi-disciplinary education" at the top of their agenda for all health professionals who should expect their education and training to include common learning with other professions during pre-registration courses, in the classroom and practice, and throughout continuing professional development (Department of Health, 2001b&c). A subsequent partnership statement, agreed between the NHS Executive and the Committee of Vice Chancellors and Principals (now Universities UK) aimed "to provide a long-term, stable basis for the relationship between the NHS and higher education , including a shared commitment to the development and expansion of inter-professional education, "flexible pathways" and "joint career initiatives" (Universities UK, 2003).

The South West was the first of the NHS regions to report how it was implementing these policies in a three-year region-wide development plan piloting different models of interprofessional teaching and learning in partnership between universities (Bournemouth, Plymouth and the West of England) and 'provider agencies' at three sites (NHS, 2002).

The high profile report of the inquiry into the untoward deaths of young children during and following heart surgery at the Bristol Royal Infirmary lent weight to the Department of Health's arguments, highlighting as it did failures in collaboration between professions and arguing persuasively for IPE to help remedy the problem (Kennedy, 2001). That case was reinforced later by Lord Laming in his report into the death of Victoria Climbie, which in a markedly different context drew attention to the tragic consequences that can follow lapses in communication and collaboration between professions (Laming, 2003).

By 2004 the Department asserted that attitudes towards more flexible working were changing with "a significant appetite for developing new roles in the services" (Department of Health, 2004a), but flexible working required flexible learning. "In

future, education, training and learning", it said, would be based on transferable, computer-based modules (anticipating the role of the ill-fated and short-lived NHS University). Programmes like those funded by the Department, i.e. the four pilot sites, would achieve national coverage and "ensure that people learn together so that they may better work together in the NHS".

Framing Knowledge and Skills

Reforms had by then been set in train by the Department of Health to implement these policies including the Knowledge and Skills Framework (Department of Health, 2004b; NHS Modernisation Agency, 2004) designed to support personal development in post, career development and service development, as well as to ensure transferability of roles, for all types and grades of NHS staff. Its subsequent development rested with 'Skills of Health' under whose auspices it provided a backdrop for discussions about the organisation and regulation of the health professions.

Establishing new regulatory bodies

Concurrently, the Department of Health overhauled the regulatory machinery for the health and social care professions, setting up three new bodies for England: the Health Professions Council (HPC), the Nursing and Midwifery Council (NMC) and General Social Care Council (GSCC). At the same time, it phased out the (UK) Council for Professions Supplementary to Medicine (CPSM), the UK Central Council for Nursing, Midwifery and Health Visiting (UCKK, the English National Board for Nursing, Midwifery and Health Visiting (ENB)[1] and the UK Central Council for Education and Training in Social Work.[2]

Sustaining commitment to IPE

Strong commitment by the outgoing organisations was reiterated by their successors.

- allied health professions

Under the heading of 'professional relationships', standards of proficiency for all professions regulated by the HPC require that registrants understand the need to build and sustain professional relationships both as an independent practitioner and collaboratively as a member of a team and are able to contribute effectively to work undertaken as part of a multidisciplinary team (Health Professions Council, 2005a: 1a&b), but guidance for the conduct of visits to programmes injects a note of caution:

"Where there is interprofessional learning the profession specific skills and knowledge of each professional group must be adequately addressed."

(Health Professions Council, 2005b)

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[1] And its counterparts for Scotland, Wales and Northern Ireland

[2] The regulatory bodies for dentistry and pharmacy were not affected, although the General Medical Council was later reformed.

- nursing and midwifery

References to interprofessional learning and working can be found throughout the NMC standards of proficiency for pre-registration nursing education. Practice must, says the Council, reflect collaboration with other members of the care team. Practice standards set for nursing were not separate and insular professional aspirations, but linked to the wider goals of achieving clinical effectiveness within health care teams and agencies. It was therefore necessary that nursing standards of proficiency encompass the capacity to contribute to this wider health care agenda. Newly registered nurses should demonstrate an understanding of the role of others by participating in interprofessional practice, establishing and maintaining collaborative working relationships with members of the health and social care team. Furthermore, they should contribute to the learning of those others by sharing knowledge and experience (Nursing and Midwifery Council, 2004: 14, 32, 34).

- social work

Pending publication by the GSCC of quality assuring the social work degree, the Department of Health (2002) issued requirements for assessing competence in practice. Providers had to demonstrate that all students undertake learning and assessment in partnership working and information sharing across professions and agencies, and were competent to work in multidisciplinary and multi–organisations teams, networks and systems.

- medicine

These statements bear comparison with those from the General Medical Council (GMC), which requires its graduates to "know about, understand and respect the roles and expertise of other health and social care professionals" and to be "able to demonstrate effective team working skills". "Medical schools", it said, "should explore and, where appropriate, provide opportunities for students to work and learn with other health and social care professionals".

Boundaries between health care professions, said the GMC in *Tomorrow's Doctors* (General Medical Council, 2003), were increasingly shifting towards more overlap in skills and responsibilities, accompanied by recognition that many tasks previously reserved for doctors were being performed by other health care workers. Effective relationships needed to be developed beyond specific teams to include also individuals beyond the health care professions. Medical schools were responding positively to the need to prepare students for effective interprofessional practice.

This was corroborated by the Chief Medical Officer (Department of Health, 2004c) who reported that some medical schools had successfully introduced learning across professions. Consultations regarding *Tomorrow's Doctors* had, nevertheless, identified a polarity of opinion on whether its next edition should stress interprofessionalism more, although the GMC itself thought that it "might be revised to include some further support for interprofessional learning". Support for that view came from the British Medical Association (2006) which concluded that the "emerging evidence suggests that

interprofessional education can, in favourable circumstances and in different ways, contribute to improving collaborative practice", although further research was needed.

Reviewing the regulatory process

Following the creation of the new regulatory bodies, the Department of Health brought together interested parties including the HPC and the NMC to develop the 'Partnership Quality Assurance Framework' (PQAF) to carry forward work which it had started with the ENB. The exercise focused on the role of Strategic Health Authorities in commissioning award-bearing programmes of learning for the nursing, midwifery and the allied health professions in England, taking into account the role of the Quality Assurance Agency (QAA) and its formulation of benchmarking statements (see below).

Work on the PQAF fed into a review of non-medical regulation (Department of Health, 2006a) which focused on ensuring proper protection for the public. Ministers came to a number of conclusions based on the review prior to its publication of which some are especially pertinent in this context. Regulators should, said Ministers, be more consistent with each other about the standards they require for persons entering their registers for the first time. Revalidation was necessary for all professions, based on the Knowledge and Skills Framework (see above), which implied a degree of standardisation across professions. There were substantial areas in which common standards were said to be desirable. Statutory regulation would be extended to include new roles, such as that of Medical Care Practitioner, but worked remained to be done to decide whether this should be the responsibility of a single regulatory body or several with a "lead regulator". These and other decisions introduced a greater degree of control over the regulatory bodies, but arguments for their amalgamation were set aside (save for the two bodies responsible for pharmacy). Further harmonisation was, however, to be kept under review including the possibility of a further reduction in their number. A parallel review by the Chief Medical Officer dealt with the regulation of medicine (Department of Health 2006b).

Neither of these reports made explicit reference to interprofessional learning and working, but moves in the first towards closer harmonisation of regulatory bodies can be viewed as step towards creating a favourable climate and a framework within which interprofessional issues can in future be addressed.

Formulating Benchmarking Statements

Of all the reforms, the preparation of benchmarking statements for the QAA had most impact on IPE. The QAA invited representatives from royal colleges and other professional associations for nursing and midwifery and for the allied health professions under the leadership of Professor Dame Jill McLeod Clark and Professor Michael Pittilo to participate in a series of working groups to draw up benchmarking statements to set standards for their respective pre-registration programmes. These statements were adopted by their organisations (QAA, 2001). Common benchmarking statements were then formulated and agreed to illustrate the shared context within which programmes were organised (QAA, 2004) distinct from the profession-specific statements for nursing, midwifery, health visiting, dietetics, speech therapy, chiropody/podiatry, prosthetics and orthotics, physiotherapy and radiography.

The common statements were to prove invaluable as the starting point for formulating content and outcomes by the pilot sites, while the specific statements reminded programme planners of the need to safeguard the distinctive learning needs of each profession. Benchmarking statements were also agreed for social work (QAA, 2000) and medicine (QAA, 2002a).

Most recently, the QAA (2006) has published a statement of common purpose for health and social care professions based on the deliberations of a broad-based steering group including, in addition to representatives the range of nursing, midwifery and the allied health professions, others from the complementary therapies, dentistry, medicine, pharmacy, psychology and social care plus the Department of Health, Skills for Health, health authorities and universities. This breadth of representation adds much to the authority of the resulting statements and the contextual understanding in which they are presented.

Many changes, said the QAA, had occurred since the development and adoption of "the emerging framework", including "considerable development" in IPE, suggesting that the benchmarking statements were in need of significant revision and re-casting to place clients' and patients' expectations of health and social care staff at the centre. Cross-professional benchmarks and statements of common purpose underpinned trends towards increasingly integrated service delivery as well as continuing growth in IPE. The challenge was not to subsume one discipline or professional activity into another but to integrate perspectives in a manner that maximised the synergies and distinctive contributions of each.

Subject benchmarking statements, said the QAA, provided:

- An external point of reference when designing and developing programmes
- General guidance for articulating programme outcomes
- Bases for variety and flexibility in programme design
- A focus on client and patient perspectives
- Creativity regarding learning in both academic and practice settings
- Information for internal and external quality assurance
- Information for prospective students
- An explication of the general academic characteristics and standards of awards across the UK

The revised statement distinguished between:

- Values in health and social care practice
- The practice of health and social care
- Knowledge and understanding for health and social care practice

They focused on students' learning to meet the needs of clients and patients within an environment that required effective team interprofessional and inter-agency working and communication, as well as expert care. They aimed to encourage shared learning between

students from a range of health and social care professions, but were not to be regarded as a national curriculum for such learning.

Under the heading of "co-operation and collaboration with colleagues" the QAA statements said that health and social care staff should:

- Respect and encourage the skills and contributions which colleagues in both their own profession and other professions bring to the care of clients and patients
- Within their working environment, support colleagues to develop their professional knowledge, skills and performance
- Not require colleagues to take on responsibilities that are beyond their level of knowledge, skills and experience

National Occupational Standards

While the benchmarking statements were being developed by the QAA to set standards for qualifying programmes, national occupational standards (NOS) and national workforce competences (NWC) were being developed by Skills for Health (www.skillsforhealth.org.uk) to provide statements of competence and good practice and measure performance outcomes. Skills for Health also envisaged that they would be taken into account when designing higher education programmes, as in the case of requirements for the social work degree. NOS and NWC may also guide and inform the formulation of outcomes and the selection of content for particular sequences of study (although with 60 such statements it would be hard to monitor how each is being put to use).

Devising National Service Frameworks

So too may the national service frameworks (see www.dh.gov.uk) published by the Department of Health, each of which sets out a long term strategy to improve a specialist area of care, with measurable goals within a set time frame. They cover (at the time of writing) coronary care, cancer, paediatric intensive care, mental health, old people, diabetes, long term care, renal, children and chronic asthmatic pulmonary diseases. Addressed primarily to managers and practitioners, each is nevertheless a rich seam to mine to inform professional and interprofessional teaching and learning.

Harmonising national, regional and local developments

These reforms constituted the national context for the four pilot programmes (to which we now turn), reforms that they endeavoured to take into account and influence, while honouring the agreements that they had made with the Department of Health at the outset. The more coherent the policy framework becomes nationally, the easier it will be to harmonise developments regionally led by Strategic Health Authorities and locally by universities and service agencies.

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Learning to Work under Pressure

Chapter 2

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Chapter 2
Learning to work under pressure

In Chapter 1 we summarised some of the many challenges for interprofessional education. In this chapter we explore how such education responds to one of these, namely the need to support health and social care practitioners as they come under increasing pressure. This may well be the key to enabling practitioners to cope with the other issues and to improve care for clients.

Responding the needs of the workers

Putting the needs of workers first may seem perverse. It may encourage the belief that interprofessionalisation, like professionalisation, is driven by collective self-interest. Our argument is more subtle; it starts from the premise that occupational stress is not only debilitating for professionals but also injurious to their work with clients; conversely that alleviating stress liberates professionals to work more effectively for the benefit of their clients. Interprofessional learning and working may be self-interest, but it is enlightened self-interest. However altruistic the professionals, interprofessional education and practice is unlikely to win friends unless and until interprofessional educators demonstrate that it will respond to the needs of workers as well as clients. Only then can they assuage fears that learning and working together will exacerbate rather than ease pressure.

Stress is inherent in professional life, especially in health and social care, stress which interprofessional education and practice seeks to mitigate as they limit demands made of any one profession and build mutual support.

Occupational stress may result from:

- greater complexity (actual or perceived) of problems that clients present
- rising public expectations
- the combination of high concentrations of stressful clientele and inadequate professional resources
- working in unfamiliar social, cultural and economic milieux
- restructuring of health and social services in response to increased demand

It would be naïve to imagine that interprofessional education alone can resolve such deep-seated problems, but it may help in part as this chapter demonstrates.

Five Themes

In this chapter we explore five persistent and pervasive situations in which health and social care professionals respond under pressure:

- ageing populations
- children and young people
- changing family structure
- poverty
- migration

They are neither exhaustive nor mutually exclusive.

We are less exercised here by the incidence and nature of the pressures generated than by their implications for professional practice in general, interprofessional practice in particular, and ways in which interprofessional education can help.

- Ageing Populations

As the number of older people increases, notably in developed countries, so too does the number of people with chronic illnesses and disabilities. On the one hand, young people with disabilities live longer; on the other hand, illnesses and disabilities increase with age. Concern to improve care for elderly, and for disabled and chronically ill adults, springs from the relative failure of health care systems to deal effectively with chronic and multiple conditions compared with acute and specific conditions amenable to modern medical and surgical intervention (McCallum, 1993; Pezzin and Kasper, 2002).

Older people may maintain active and productive life longer in developed countries than in times past thanks to better income security, better housing, better nutrition and medical advances, but dependence on health and social care services is at best postponed. Chronic conditions multiply inexorably with age exceeding the capacity of any one profession or agency.

Older, disabled and chronically ill people may benefit as much as healthier people from specific medical and surgical interventions, but only concerted action by a number of professions and agencies can respond adequately to their overall situation. In the UK a ten year plan of action for restructuring care of the elderly was published in 2001 (Department of Health 2001b) designed to root out discrimination against older people through integration of services across health and social care and other key stakeholders, such as local councils. Progress will be measured against set criteria, such as achievements in the field of health promotion.

Interprofessional strategies have been launched in many parts of the US to coordinate care for older people. The Veterans Administration established Interdisciplinary Team Training in Geriatrics (ITTG) in 1979 at twelve of its centres to provide a cadre of health practitioners with the knowledge and competencies to meet the wide spectrum of health care and service needs of the ageing veteran (Feazel, 1990). The John A. Hartford Foundation supported education in geriatric medicine and more recently provided funds to support the development of academic leadership in geriatric care. Having funded programs to train physicians to care for the elderly, the Foundation built on the experience gained to re-channel and increase funding also to include nurses, social workers and others in 13 sites (Hyer, 1998). It promoted and funded the Geriatric Interdisciplinary Team Training Program (GITT), driven by the belief that the unprecedented growth in the number and proportion of the elderly with complex problems required the skill of several collaborating disciplines (Siegler et al., 1998; John Hartford Foundation, 2004).

Support from the W.K. Kellogg Foundation to improve care for older people is well illustrated by the following example (see Box 2.1).

Six teams in Michigan were involved in a training program in part funded by the W.K. Kellogg Foundation designed to promote the development of services for older people in communities with less than 50,000 population and more than 20 miles from a major referral centre. The goal was to establish a working coalition within each community that would promote and develop interprofessional services for older adults according to local needs and priorities.

Key components were: the development of a team of health care professionals trained in geriatric health care; sponsorship by a community agency to provide resources for geriatric services; and appointment of a community advisory board to ensure that the services being offered were appropriate and desirable. Program staff included nurses, social workers, physicians and an educational consultant.

The trainers worked with each sponsoring agency to choose the interprofessional team. Each included a physician, a nurse, a social worker and an administrator. The training comprised two one-week sessions on the University of Michigan campus for all three teams together with clinical activities completed in between, ongoing consultative support and an annual retreat. Content was both generic and profession-specific. In addition to didactic methods and case studies, the training incorporated practice with feedback to facilitate problem solving and skills development.

Each team prepared quarterly progress reports including a log of clinical activities. Members also completed questionnaires before and after the campus training and again six and 18 months afterwards. Questions covered perceptions of project goals, team effectiveness, geriatric services offered and factors seen to be positively influencing or impeding implementation of geriatric clinical services.

Responses to the baseline questionnaire were similar across the teams. Three teams reported implementing a clinical service for older adults at 18 months. Two of the remaining teams had experienced loss of members. The third was struggling to define the elements of the clinical service and in conflict with the local doctors and dissatisfied with its progress.

Why did some teams succeed and others fail? Two team case histories were selected to probe this question. Critical differences, it emerged, were financial support from sponsoring agencies and positive reinforcement from the community.

Box 2.1 Community coalitions to improve care for older people. (Anderson et al., 1994)

Further reinforcement in the US came from curriculum recommendations from the Task Force on Resident Training in Geriatrics Interdisciplinary Team Care (Counsell et al., 1999). As its title suggests, the Task Force focused on training for physicians, but to prepare them to establish teams and to work effectively in them.

Interprofessional education has also been introduced in many countries to respond to the multiple needs of people with physical and learning disabilities, and chronic illnesses such as diabetes, cardio vascular disease (Solberg et al., 1998), Parkinson's disease, and survivors of the HIV pandemic as their life expectancy improves.

For example, in the US, the Robert Wood Johnson Foundation funded major initiatives in interprofessional management of chronic conditions. In the UK, a number of charities were active of which we choose one (see Box 2.2).

Continuing Care at Home (CONCAH) ran a series of workshops throughout the UK designed to be practical and accessible to primary care professionals. They focused on the needs of chronically disabled people with neurological diseases, such as Parkinson's Disease, and Epilepsy, which practitioners felt were not addressed adequately. The workshop format was based on adult learning principles in that, among other features, they were interactive and learner centred, and challenged the teams to commit to change and audit progress. Development was based on two pilot workshops that involved seven general practice teams and one hospital based team. Innovative features of the workshops were the involvement of the patients and their caregivers and the input from a multidisciplinary panel of local experts.

Workshops were then rolled out across the UK, 17 being completed by the time of the evaluation. In total, there were 250 participants. Feedback on the sessions was overwhelmingly positive, with only a very small number of negative reflections. The organisers concluded that it was essential to moderate carefully the degree of the input from the doctors, be they GPs or members of the expert panel. Contributions from the patients and caregivers were found to be essential to gain insights into problems faced in their daily lives. An important feature of the evaluation was assessment of the extent to which plans agreed during the workshops had been implemented. In 40 out of 48 practices these plans were working. Improved collaboration, another aim of the initiative, in the participants' view was somewhat less successful, only 26 out 48 practices reporting progress in this area.

Box 2.2 Learning to respond together to the needs of chronically disabled people. (Jones, 1998)

Few if any fields have developed a more distinctive interprofessional profile than palliative care, responding as it does to the needs of mind, body and spirit within a holistic philosophy as our next example from The Netherlands exemplifies (Box 2.3). Noteworthy is recognition that quality of care for clients depends critically upon the quality of care for workers in an inherently stressful setting.

Patients came first, but plans were made from the outset to build in a social support system to ease stress and prevent burnout amongst caregivers in one of the first palliative care units to open in the Netherlands. In-house interprofessional training was arranged during the first year complemented by a weekly support group on which we focus here. All members of the team were invited but not required to attend. Work schedules disrupted continuity. Each week the composition of the group was different. Each meeting lasted 90 minutes facilitated by one of two therapists in turn after a relaxation exercise. There was no fixed structure thereafter, the participants choosing topics for discussion. Participation was reportedly poor at first but improved.

Facilitators and participants tended to hold different views regarding purpose and content. One facilitator described the meetings as "a safe place where the team members get the opportunity to enter their personal experiences of working in palliative care – and to care for themselves" (p 101). Her role was to guide the process of introspection, but stressed that these were not therapeutic groups. It was her responsibility to ensure that participants could safely go home or back to work at the end of each session.

For most of the participants the focus was on solving problems which had arisen in

patient care. An 'inner circle' of nurses in the Unit was more dependent upon the facilitators to provide advice than was an 'outer circle' of social, homecare and psychiatric nurses plus the physiotherapist, dietician and pastor, who looked more to each other for interprofessional support. Some of the inner circle also wanted more structure with the facilitators volunteering ideas for discussion to break silences with which they were uneasy.

Discussions most often concerned problems in teamwork and collaboration, feelings of insecurity and frustration regarding lack of institutional support and resource constraints, as well as personal feelings of exhaustion and incompetence. Issues about loss and bereavement inherent in palliative work did come up, but less often than anticipated. Experience tended to confirm the view found in the literature that stress, albeit inherent in palliative care, is lessoned if recognised early and offset by positive job satisfaction with staff support built in.

Box 2.3 Supporting staff and patients in hospice care.
(van Staa et al., 2000)

- Children and Young People

Concern about the wellbeing of children and young people at risk has generated efforts to integrate services for them and their families, as reported in a survey conducted by Magrab et al. (1997) for the Organization for Economic Co-operation and Development (OECD) in seven of its member countries. She found that few childcare professionals were trained to implement or work in an integrated service delivery system. In Italy, France and the Netherlands several "multidisciplinary" training initiatives had been launched in response to national policies to coordinate services for children and young people at risk and their families, but most were idiosyncratic and regional or local. Similarly, said Magrab and her colleagues, the UK 1989 Children Act had "spawned a variety of multidisciplinary training activities" (p 101).

She argued for a 'key curriculum' comprising the following for all professions working with children at risk:

- Knowledge of concepts of service integration at all levels
- Knowledge of the roles of the various professions who serve children at risk
- Preparation for functioning as an effective team member
- Preparation for coordinating services for the family

Tucker et al. (1999) advocated an 'interdisciplinary' framework for those working with children and young people in education, health and social care taking into account:

- The child's personal development and growth
- The kinds and levels of support needed to foster and maintain wellbeing
- The range of environmental factors that will necessarily impact on life chances, hopes and aspirations for the future

Principles of intervention should be applied in a common model of intervention focusing on points of transition for the child and always keeping his or her rights central.

Based on findings from her small-scale research studies into education for people working with children and young people, Lacey (2001) called for management systems to support practitioners who strive to work together with children and young people with clear lines of communication and a common focus.

Numerous projects in the US take the school as the focus for interprofessional collaboration. The goal for Lawson and Briar-Lawson (1997) was 'school reform' - a term which they admit has many meanings and many models including:

- School based youth services
- Coordinated services to 'fix at risk students'
- Co-located, integrated and comprehensive services for children, youth and families

Preventing child abuse has become the sharp end of childcare. Nowhere has the need for closer collaboration between professions become more painfully apparent (see Box 2.4).

Protecting children from abuse was sorely neglected in Eastern European countries before the collapse of one-party rule in 1989. Policy makers and researchers were handicapped by lack of reliable data and a legacy of policies that tended to undermine the family unity. Professional training in child abuse was non-existent, as the totalitarian ideology did not admit of existence of social ills, which were ascribed exclusively to the 'decadent' West. Furthermore, professionals dealing with children were mistrusted as they were seen to be the agents of the oppressive state apparatus.

Dissolution of rigid societal structures and economic reverses created fertile ground for child abuse. The Open Society Institute (OPI) established by George Soros became involved in a wide range of educational initiatives in 17 former Eastern Block countries. As teachers sent from the US began to report on mental health problems amongst children, evidence of abuse and neglect emerged. In 1995 the OPI established the East European Child Abuse and Mental Health Project. The intention of the project founders was to enable the local teams to become independent non-governmental organisations (NGOs), locally registered and capable of forwarding the agenda for development.

Project leaders adopted a three-pronged approach:
- prevention by supporting families, including education on child development and professional support in early childhood years
- identification and support for families with problems, rather than removing children into care
- recognition that child abuse is a societal issue that requires collaboration at all levels in the system from policy makers to professionals, including the police.

One of the most influential projects took as its focus the education of key professionals from all the relevant agencies and fostering interprofessional teams who would themselves become a core political and educational force within their respective countries. The educational program had two phases. Each participating country was required to field a team of key professionals actively involved in the care of abused children, who would be committed to attend a series of four week-long educational conferences run in different countries, involving altogether 100 people. The first three weeks were mainly content oriented, dealing with facts of abuse recognition, the role of different agencies and diverse approaches to treatment.

The last week signalled a move toward the next phase by focusing on team development. At this point, the individual teams were asked to expand their membership to include other agencies, such as police and lawyers, who would constitute the kernel for change in their respective countries. From 1998, support for this phase of development included further conferences on "multidisciplinary" organisational skills and mentoring to individual teams. This involved site visits during which it was possible to address specific local issues and to engage in action-oriented team learning and planning.

Leaders experienced numerous challenges in implementing the project. These included lack of public awareness, rigid professional hierarchies and the need to change social policies.

Box 2.4 Facing up to child abuse.
(Sicher et al., 2000)

The recurrent message in reports into the abuse and often death of children in the UK, especially since the early 1970s, (Cleveland Report, 1988; Department of Health and Social Security 1974; Birchall and Hallett, 1995) is failure in communication between professionals variously responsible for the same child – general practitioners, health visitors, police officers, schoolteachers, social workers and others. All too often each was in possession of one or more piece of the jigsaw, but none was able to see the whole family picture before disaster struck. Time and again it seemed as though sooner and better communication might have averted tragedy. Children were at risk, but so too were workers operating under unremitting stress and fear of rebuke when mistakes happened.

Official inquiries called repeatedly for 'joint training' in the belief that this would engender trust and better communication between the professions responsible for child protection (see Box 2.5).

A London-based consortium piloted proposals from the then UK Central Council for Education and Training in Social Work (CCETSW) and the then English National Board for Nursing Midwifery and Health Visiting (ENB) for ten and sixty day courses for social work and nurse educators during a programme at the Tavistock Centre. Both courses aimed to determine an effective model for the development of shared teaching and learning for child protection.

The shorter course was competency-based. Outcomes included ability to work with other professionals, to ask for help and refer cases on when appropriate, within a common framework of knowledge and understanding of law, policy, practice and procedures. Adult learning methods drew on the existing knowledge and skills of participants from nursing, therapy, leisure and youth services. The approach was active, experiential and facilitative. The course met one day for each of the ten weeks and comprised three modules. Assessment was formative. Evaluation focused on satisfaction with presentation and content.

The longer course, leading to a master's in child protection, set out to enable participants to work effectively in multiprofessional networks. "Serious intellectual fare" (page 50) included knowledge of research methods and findings, law and a range of applied theoretical and conceptual frameworks. Again, emphasis was put on learning from experience. The pattern was day release every two weeks for two

years. Participants came from social work, health visiting and nursing. Assessment was summative and included written assignments. Evaluation was based on before and after questionnaires augmented by interviews. The course had reportedly met expectations regarding inter-agency working.

Box 2.5 Learning how to protect children.
(Stanford and Yelloly et al., 1994)

So high profile has concern about child protection become in the UK that it has until recently tended to overshadow the need for wider collaboration in work with other children and their families (Chief Secretary to the Treasury, 2003).

- Changing family structure

The decline of the extended family as a social unit, with loss of mutual support and control, carries major implications for the provision of health and social care services and for the professions that deliver them. The nuclear family, which has replaced the extended family in many developed countries, is also in jeopardy as falling birth rates and family breakdown contribute to the growing number of one parent families and more single people living alone. Alternative lifestyles generate alternative support systems more or less adequately with more or less implications for the health and social care professions.

The decline of traditional notions of family is a double challenge. Although health and social care professionals may find it difficult to establish and sustain contact with an often mobile population of single people, they are nevertheless trained for the most part to work with individuals rather than families. Working pressures, which often preclude home visits, reduce the likelihood that the individual will be seen and understood as a member of a family. Workers may fail to recognise the impact of family dynamics on the individual member, or the significance of positive and negative interactions between members for the family as a unit.

Workers from different professions – doctor, nurse, probation officer, priest, school teacher, social worker, youth leader, and so on – may be in touch with different members of the same family unbeknown to each other. Contact, if and when established between those workers, may be inhibited by the need for each to work within agency and professional structures, policies and regulations, and to respect confidences entrusted by his or her client within the family. The need for collaboration may not always be apparent. Professionals are therefore ill placed to mobilise the resources of the whole family to support individual members in need and to respond together to the family based upon their collective understanding.

These are some of the reasons why family systems theory has been introduced into interprofessional education and practice as the following case study exemplifies (see Box 2.6). It draws on experience in family therapy, but is more inclusive. Systemic family work involves, at least potentially, all professions involved in working with a family and its members. Interprofessional education for family systems work is correspondingly inclusive.

The School of Medicine at the University of Oulu in Finland launched an interprofessional family systems programme in 2002 to replace a family doctor

programme that had run for some years. The new programme lasted two years and was based on systems theory, the biopsychosocial notion of health and illness (Engel, 1977) and social constructionism. It was built around three key concepts – client and family orientation, networking and resources utilization. It aimed to give participants competencies for interprofessional co-operation with families and communities. It included direct teaching for two days per month and independent studies. Innovative learning methods included preparing genogrammes (about personal family backgrounds) and network charts (based on work with communities).

The teams recruited consisted of participants from different professions, 76 trainees being chosen from the following professions: careers advice, counselling, general practice, nursing, parish work, physiotherapy, psychology, health professions' teaching, school teaching and social work. They were divided into four groups of 18 to 20 meeting for the most part in three municipalities learning with fellow trainees from their own communities.

The common strand prompting enrolment was a desire to learn new ways to solve the increasingly complex problems of clients and client families and to find ways to cope at work.

Trainees became more aware of the need to approach their clients as equals, respecting their autonomy and responsibility for their own lives building on their personal resources. They also learned that it was possible by working in teams to alleviate the psychic burden on individual workers, thereby releasing their creativity. They began to work more often in pairs and groups, acquiring new ideas from each other, applying them in work with clients as they came to appreciate that no one profession had the absolute truth and to be more tolerant of uncertainty.

Work reportedly became more rewarding and more hopeful. Trainees said that they coped better under pressure with less burnout. They found the courage to look at themselves, as they became more self-aware.

Box 2.6 Learning to work together with the whole family.
(Larivaara and Taanila, 2004)

- Poverty

The link between poverty and health has long been acknowledged. The WHO has led a concerted effort during the past 20 years, especially under the leadership of its former Director-General, Dr Brundtland, to re-orient its work from concentration on specific health interventions, such as the elimination of polio and tuberculosis, to address wider economic and political concerns. At the same time, it recognised that local, national and international partnership is essential for effective change (WHO, 1999). It now monitors approaches to poverty reduction in individual countries (Dood and Hinshelwood, 2002) taking into account quality of services and ease of access to them, but also factors such as underpinning attitudes within political and health delivery systems that affect implementation of public health and primary care interventions.

In the UK, the groundbreaking report by Sir Douglas Black (Black et al., 1988) established the link between economic and health status. Its raft of recommendations conflicted with the ideology of the Government of the day and was rejected. The incoming Government elected in 1997 commissioned a new report from Sir Donald

Acheson (Acheson, 1998) who identified the need for a multifaceted approach to tackle health inequalities. Ministers responded with a commitment to joint working across all relevant government departments including education, employment and housing, as well as health (Department of Health, 1999). The impact of 'seamless working' can be seen in the introduction of health improvement programmes (HIMPs) which required commitment from both health and local authorities to implement a concerted strategy for change.

Health professionals have become more aware of the adverse effects of poverty on the health of individuals, young and old, and of families. They know all too well that dealing with the presenting health problem is not enough without tackling underlying economic and social causes, but many are ill-placed and ill-equipped to engage directly with them. Social care professionals have become more aware of chronic health conditions associated with poverty and attendant unemployment, malnutrition and poor housing and educational disadvantage, but they are neither equipped nor authorised to respond. Health and social care professions therefore need each other. Viewed thus, they are the axis around which collaboration revolves involving a wider spectrum of professions.

Poverty has more impact on some health and social care workers than on others, given its uneven distribution between communities and between countries. Clients in inner city or downtown areas present more frequent, more intense, more complex and more intractable problems rooted in poverty than in the more affluent suburbs. Services under strain respond with difficulty beset by vacancies, high turnover and low morale among the professional workforce compounded by less cash resources resulting from less revenue from local taxation. Nowhere is the need for mutual support between professions and between agencies more compelling than in the inner city to respond to the magnitude and complexity of the problems and to share the load, nor professions and agencies alike more isolated where they need each other most. The following example indicates how one team reviewed the impact of poverty on its clients and effected improvements (see Box 2.7).

Research into poverty in Nottingham showing that about half of all inhabitants were dependent on state benefits prompted a two-year SPIDA (Strategies for Practices in Disadvantaged Areas) action research project. The design of the project facilitated learning and evaluation. However, it became clear early on that it was not appropriate to follow the initial design, which pre-supposed specific outcomes. In a true action research fashion, the project workers collaborated with the relevant stakeholders to develop a design that brought to the fore processes of change that challenged established ways of working and professional or academic hierarchies. The research was based in a single-handed inner city practice serving a large population of young people. A third of the patients came from non-white backgrounds.

Applying principles of collaborative enquiry, all tasks were shared such as data collection and contributions to the writing of reports. Team learning principles propounded by Dechant, Marsick and Kasl (1993) informed the design of the process of team interaction.

Enquiry members met fortnightly (for 30 sessions) to learn and reflect on their attitudes to poverty, to share their findings from data collection and their efforts to

liaise with other agencies. Local people were involved as well, first through an open meeting to compare the progress of the project and then through focus groups. This provided a further input to the project.

Outcomes of the project were encouraging. Individual learning developed into team-based interprofessional learning. Members felt empowered to participate equally within the team and to reach out to other agencies and other primary care centres. Outreach involved the team in collaborating, for instance, with a school nurse on health education and propagating the message of the project in other localities.

Attitudes to poverty and understanding of the importance of consistent anti-racist approaches were cited as positive outcomes. The team created a poverty profile – a collection of statistics about their population that detailed the demographic characteristics and health impact of poverty, enhanced by the local directory of services. However, the most powerful learning occurred when individual team members began to have insight into the impact of poverty on living conditions and their ability to act empathetically on behalf of those in deprived circumstances. The organisation of the surgery was affected as well, for example, by providing better information and more baby clinic sessions.

Box 2.7 Joint action on poverty. (Bond, 1999)

Similar problems can and do arise in rural areas where depopulation and associated loss of economic productivity and public services may exacerbate them. Here too there are often chronic problems in recruiting and retaining health professionals, especially doctors. These problems call for different models for collaborative practice sustained by different models of interprofessional education.

If poverty impacts on professionals in developed countries how much more so in developing countries where its prevalence and severity, and lack of resources to respond, is so much greater? This makes the case for interprofessional collaboration even more compelling. Some developing countries have been constrained by demarcations between professions inherited from colonial days, but others have developed local models responsive to local needs designed to deploy scarce resources to optimal effect.

However much health and social care professions collaborate with individuals and families they can do little more than alleviate symptoms unless and until community intervention tackles underlying economic and social causes. Here especially, developed countries have much to learn from developing countries (see Box 2.8).

South African community partnerships began socially accountable models for health professions education, research and service in 1991. Most South Africans have inadequate access to basic services including health care. Between 25% and 55% live in poverty. Seventy five percent of the poor live in rural areas. Malnutrition is common, infant mortality high and HIV illness endemic. Against this background the W.K. Kellogg Foundation initiated seven Community Partnerships in Health Professions Education.

In Boeshbuck Ridge, for example, some 200 students rotated through the project each year as part of their "rural block". They came from medicine, occupational therapy, physiotherapy, speech and hearing therapy and social work. The teaching

and learning context was a community hospital and two community health centres (staffed by nurses and visited by doctors twice a week). In addition, a rehabilitation centre accommodated disabled children cared for by their parents supported by health workers, community rehabilitation workers, traditional healers and faith healers.

Students stayed in the homes of community members in neighbouring villages and townships. They visited local schools to conduct health-related research projects. Much of their learning was based on problem case studies. Assessment included reports on family attachments, student diaries and examinations.

These programmes have lacked systematic evaluation, but two have reportedly generated extensive cross-discipline collaboration among traditionally discipline-specific faculty, resulting in curricular changes including integrated modules. All three have resulted in broader based services involving more professions. Communities accustomed to receiving only nursing care now have dentistry, occupational therapy, opthalmology, rehabilitation and nutrition services. Students reportedly learned to refer to other professions and to improve their critical thinking through exposure to other professions and different approaches. They developed an understanding of the health care needs of their communities while their teachers thought beyond the boundaries of their respective disciplines. Early exposure, said the report, increased the chance that students would choose to work in these communities. Not least, aspirations were raised, and options widened, for young people in the communities as they identified with students embarking on so many different careers.

Box 2.8 Learning to work with rural poverty. (Lazarus et al., 1998)

- Migration

Pressure on health and social care workers is further exacerbated by increased mobility of population within and between countries, which can weaken kinship ties and increase dependence upon health and social care services in both the home and host community.

Migrants tend to be drawn from the most educated and most enterprising groups, whose economic and social contribution cannot easily be replaced in their home communities. This adds greatly to the concentration of highly dependent groups left behind. Many are elderly with multiple needs taxing limited health, social care and other services.

Immigrants bring highly marketable educational skills, which inject new enterprise into the economy of the host nations. Indeed, many join the health and social care workforce.

Settling in the host community is by no means always stressful, nor unduly demanding on health and social care services. Stress is more likely when language, ethnicity and/or religion differ from the host community and especially for those who arrive as refugees or illegally; stress which can extend to those to whom they turn for help and advice. Some migrant groups bring different disease patterns, from different cultural contexts, with which health care workers may be unfamiliar, lacking the expertise to diagnose and treat. They may also present health conditions for which treatment was not available in the country of origin made worse by neglect and

sometimes by poor living conditions (Karmi, 1993). Stress in adjusting to cultural expectations, reluctance to seek help from official agencies, limited income after remitting money to relatives back home and sometimes inability to communicate in the language of the host country, all, any or more than these may exacerbate problems (Lillie-Blanton and Hudman, 2001).

Concentration of immigrants in the inner city puts pressure on hard-pressed services which must be ready to respond to the needs of a transient population in intermittent contact with health and social care workers and liable to fall between the safety nets which each service seeks to provide. Problems, if and when presented, may be more advanced, less amenable to help and, in consequence, more demanding on workers. Effective action lies in working with minority groups ready and able to support new arrivals. Although agencies and professions may do so separately, more effective relations may be built collectively.

Many immigrants, their children and grandchildren establish themselves successfully in the land of their adoption. Others fail to escape the poverty trap exacerbated by poor housing, under-education and unemployment. Disadvantage passes from generation to generation. So too does discrimination.

Customs, beliefs, life styles and dietary habits handed down may be associated with poor health. Engaging with these is difficult, if not impossible, without active support from the minority communities concerned. External intervention may be construed as insensitive at best, and discriminatory at worst, bedevilled by ethical and cultural conundrums. Few health and social care professionals feel adequately equipped to deal with these situations, although some from particular communities, or working closely with them, are well placed to build coalitions between professionals and community leaders.

One interprofessional network has made a concerted response to the combined impact of poverty, migration and multiculturalism on health. 'Community Campus Partnership' originated in the US and has since spread worldwide. It engages faculty and students from schools of medicine, health and social care in health-related collaborative projects with surrounding community groups to improve local services and, in doing so, to strengthen community orientation in learning and the quality and quantity of community-based practice placements (Gelmon at al., 1998). Some projects are even more ambitious. They mobilise the expertise of the university across all academic disciplines, singly and in combination, so far as necessary and practicable, to respond to wide-ranging needs identified by local people in the surrounding community to improve their quality of life (Casto et al., 1998).

The community-campus partnership movement has taken root in many developing countries, notably in Latin America and South Africa, supported by the W.K. Kellogg Foundation, which redirected funds previously allocated to support US initiatives. It is closely associated with 'Towards Unity for Health' (TUFH) launched with backing from the WHO in 1999 to improve the relevance and performance of health service delivery systems through the creation of productive and sustainable partnerships between universities and communities. It includes 23 projects in 11 Latin American countries involving 15 health specialties in developing experimental models of health care reform (Boelen, 2000; Goble, 2003) and became part of the worldwide 'Network:

Community Partnerships for Health through Innovative Education, Service and Research' in 2002 which was then renamed the 'Network: Towards Unity for Health'.

We have already included one community-campus example from South Africa (see Box 2.8). We have chosen for our second one of the many American community-campus partnership programs, which mobilises the combined capacity of health and social care professions in hard pressed services to respond to seemingly intractable poverty in communities with large numbers of immigrants and minority ethnic groups. It happens to be in a sparsely populated rural area, but might equally be in an inner city (see Box 2.9).

The Nuestro Salud Project in Arizona was one of five linked interprofessional projects in the US seeking to improve recruitment of health care workers in rural areas, providing training for 17 different professions serving disadvantaged Hispanic, Afro-American, Amish, Native American and Anglo populations. Services provided included individual clinical care, case management, population-level interventions and collaborative research. Case conferences and local coalitions facilitated collaboration with local communities.

The Project served Santa Cruz County bordering Mexico with a population density of 25.7 people per square mile of whom 78% were Hispanic. Only 32% were high school graduates, 54% did not have health insurance, 24% were unemployed and the median income was 23% of the State average. Cross-border trade was the backbone of the economy, but brought with it problems of law enforcement (including illegal migration) and environmental stress from pollution, including rivers polluted by raw sewage.

The program provided practice training lasting between four weeks and one year for graduate and undergraduate students in nursing, pharmacy, medicine, social work, public health and nutrition from two universities. Their first assignment was to conduct a community-based assessment using a systems model, interviewing residents to obtain their perspectives. Residents then asked the program for student involvement in community projects, from which the students made a choice. Examples included helping to run health fairs, convening a domestic violence forum, teaching child development and producing a TV series on adolescent health. Knowledge derived from the local community ensured that case management was responsive where 80% of clients had low income and 54% language problems. Self-instructional modules backed up the practice learning in its early stages complemented by weekly seminars on case management and community health.

Exposure to rural practice helped rural recruitment and retention strategies. Data from one of the projects indicated that 20% of the students went on to practice in rural areas. Other benefits were a reduction in the isolation of rural practitioners, relationship building between universities and those practitioners and networking between rural and urban service providers. Urban based professionals meeting rural residents were thought likely to be more aware of their problems, while university faculty developed expertise in rural care.

Box 2.9 Recruiting professionals in a deprived rural community. (Slack et al., 2002)

A chain reaction?

Reviewing interprofessional education in West London, Barr et al. (1998) formulated a chain reaction, which we have modified below to demonstrate how such education as it leads into interprofessional practice holds the potential to not only reduce stress but also to improve client care:

[Insert Figure 2.1 about here]

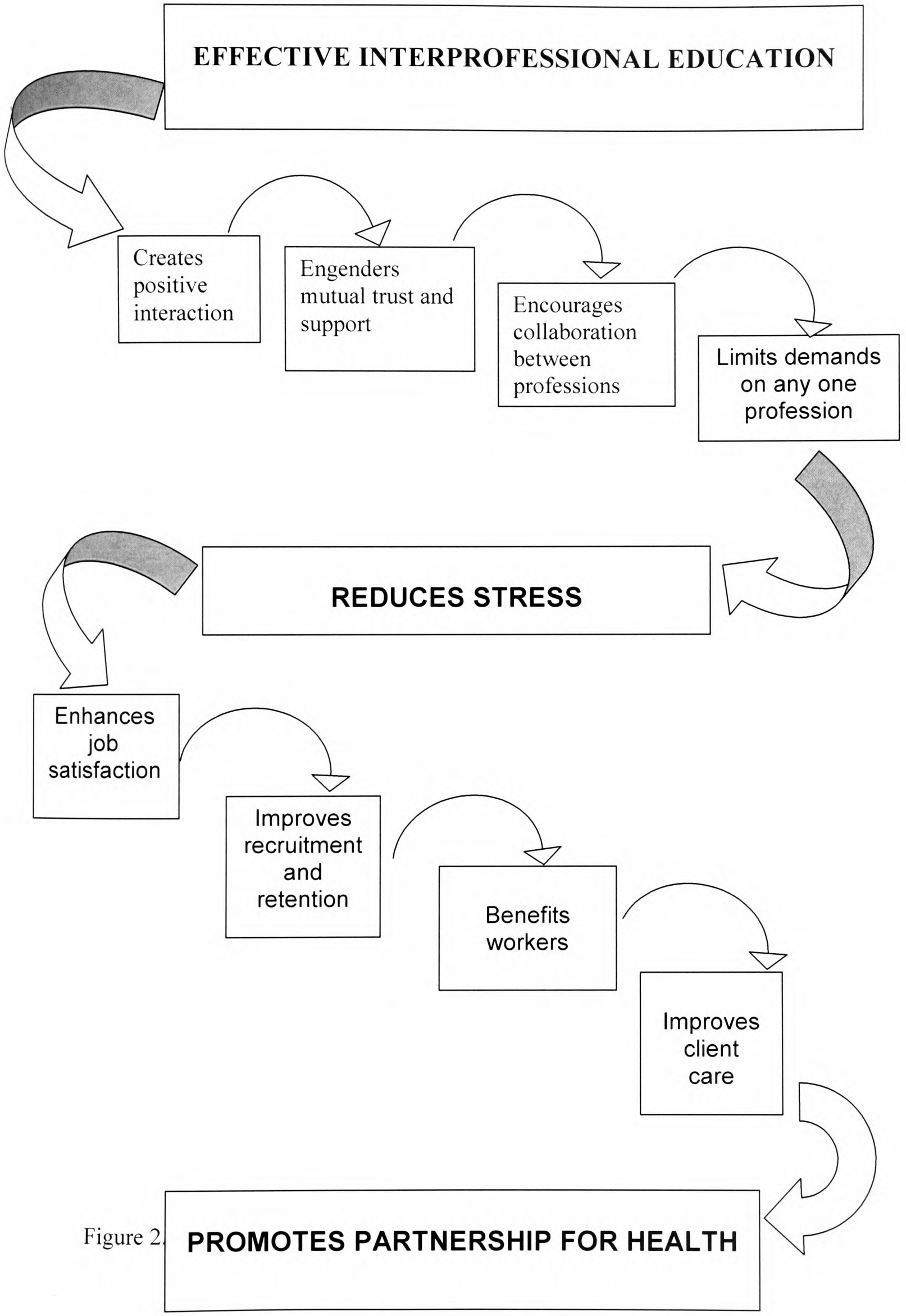

Figure 2.

Each of the links made can be found in at least one of the examples given in this chapter.

Positive interaction

- Problem solving complemented didactic teaching in Michigan
- CONCAH workshops in the UK were interactive and learner centred
- Participants in the Finland worked more in pairs and groups as their programme progressed
- Participation was problem based and improved over time in the Netherlands

Mutual trust and support

- Workshops in Eastern Europe engendered trust not possible in totalitarian days

Collaboration

- The Community Coalition in Michigan cultivated interprofessional collaboration in teams and with local communities
- The support group in the Dutch Palliative Care Unit discussed problems in teams, but was more successful cultivating collaborative learning among senior than junior staff
- Team development was the second part of the workshops in Eastern Europe
- Students on the longer courses at the Tavistock Centre learned how to network
- Individual learning gave way to team-based learning in Nottingham
- Teachers from different disciplines collaborated more after engaging in interprofessional practice learning for their students

Limiting demands

- Students on the shorter Tavistock course learned to ask for help and to refer
- Participants in Finland felt less omnipotent as they learnt to value clients' resources

Reducing stress

- Participants in CONCAH workshops developed insight in the problems faced in working lives
- Stress was lessened when recognised early in the Dutch Palliative Care Unit
- Participants in Finland become more able to tolerate uncertainty, coped better with stress and were less prone to burn out

Enhanced job satisfaction

- Participants in Nottingham were empowered
- Participants in Finland found ways to cope at work

Improved recruitment and retentions

- Interprofessional practice learning on the US/Mexican border improved staff recruitment and retention
- Practice experience in rural areas in South Africa encouraged students to consider working in rural communities

Improved client care

- Some of the teams in the Community Coalition established new services
- Forty of 48 practices taking part in CONCAH workshops implemented plans made
- Action research in Nottingham challenged existing ways of working
- Students on the US/Mexican border and in South Africa initiated community projects during their placements
- Career aspirations were raised for young people in rural South African communities as a result of meeting students

Examples of interprofessional education, however carefully chosen, cannot establish conclusively each link in the above chain. Nor can interprofessional education do so alone. It paves the way for teamwork which improves job satisfaction and reduces occupational stress and turnover as UK (Borrill et al., 2001) and US studies (Baggs and Ryan, 1990; Baggs et al., 1997) have found. Effective interprofessional education does not, however, hand over to teamwork; it continues alongside and sometimes within it.

In Conclusion

Many of the studies included in our systematic review (see Chapter 6) reported participants' satisfaction with the learning experience, but by their very nature could not tell us about satisfaction with interprofessional working. Findings which reported impact on practice referred invariably to improvements in services and/or benefit to clients. Client and practitioner satisfaction are, however, related entities as arguments and evidence presented in this chapter have shown.

We offer an overview of interprofessional education in the next chapter before presenting the evidence from our systematic review,.

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Paper A8

Interprofessional Education

Today, Yesterday and Tomorrow

A review

2002 (reprinted and updated 2005)

London

Higher Education Academy
Health Science and Practice Subject Centre

Occasional Paper No. 1

INTERPROFESSIONAL EDUCATION

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FOREWORD

This review of Interprofessional Education represents the first of a series of occasional papers commissioned by the Learning and Teaching Support Network (LTSN) Centre for Health Sciences and Practice. The role of the LTSN UK national network is to promote good practices in Learning and Teaching in Institutions of Higher Education.

An initial step in this endeavour is to establish what is known about current practices in a variety of aspects of learning and teaching, and about their successes and limitations. The majority of teachers and practitioners in the Health Sciences are keen to improve their approaches to these issues but are highly occupied with the content of their subject and have little time to investigate the educational literature on the delivery of that content.

A role of the LTSN is to provide easy access to that literature which could help inform the community about existing evidence (or lack thereof) concerning what works and in what contexts. At an early stage of the creation of the LTSN (started in January 2000) we conducted a needs analysis of the Health Sciences and Practice community. One of the most recurrent themes was that of Interprofessional Education. The impetus for development in this area therefore comes from the grass roots as well as from the NHS and other high level initiatives.

Who better to provide a document detailing the state of the art 'today, yesterday and tomorrow' than Professor Hugh Barr? Professor Barr is a distinguished leader in the subject through his manifold roles as Emeritus Professor and Visiting Professor of Interprofessional Education at the University of Westminster and University of Greenwich respectively, Editor-in-Chief of the Journal of Interprofessional Care, and President of the UK Centre for the Advancement of Interprofessional Education (CAIPE). His contribution to our understanding of the current situation and priorities for future research and development is invaluable.

Professor Catherine Geissler
Director LTSN Centre for Health Sciences and Practice

We are very pleased that the LTSN Centres for Medicine, Dentistry and Veterinary Medicine and for Social Policy and Social Work have supported this paper as follows:

The **LTSN for Medicine, Dentistry and Veterinary Medicine** is pleased to welcome this timely report on Interprofessional Education. This will be an invaluable contribution to our mutual understanding of what must be, fundamentally, a shared concern among all those involved in delivering healthcare. Public policies, as outlined in the new NHS modernisation plans, are also challenging us to take up these issues. This report by Professor Hugh Barr, commissioned by the LTSN for Health Sciences & Practice, urges us to take stock of our current practices and attitudes toward educating teams of professionals, ultimately to ensure the best possible continuous care in our communities. Those reading this report will, I believe, come away with a much clearer insight into the issues of the complex languages, evidence, goals and hopes surrounding our mutual need for Interprofessional education. We are grateful to the author and The LTSN for Health Sciences & Practice for producing this pertinent and provocative report.

Professor R.K.Jordan
Director, LTSN for Medicine, Dentistry and Veterinary Medicine

The LTSN for Social Policy and Social Work (SWAP) is pleased to welcome this report on Interprofessional Education, which will make an important contribution to the development of learning and teaching in this area. As connections between health and social care are gradually forged at practice, professional and organisational levels, education and training must reflect these changes, and in some areas help to shape them. Interprofessional practice is at the heart of social work (specified in the National Occupational Standards), as effective working with colleagues in health, police, education, housing and many other fields is essential. It is a concern for social work academics, and a range of approaches to interprofessional education have developed at both qualifying and post qualifying level. Consideration of social policy is an important theme within interprofessional education, so academics from this discipline can play a role in defining and highlighting the issues; moreover social policy itself is concerned with the changing nature of professional activities, and the impact of shifting organisational and policy frameworks.

Whilst many educational initiatives have been taken to develop interprofessional education, both at qualifying and post qualifying levels, we are only beginning to understand the complexity of this as a pedagogic activity, and to develop notions of effective practice. This report represents an important building block in that endeavour. Whilst some sections can readily be used by academics and practitioners involved with

interprofessional education to review their practice, the report as a whole might provide a springboard for further research and practice development in this area.

Hilary Burgess, Learning and Teaching Adviser, SWAP LTSN
Jackie Rafferty, Director, SWAP LTSN

CONTENTS

Acknowledgements

I am indebted to Barbara Clague, Dr Della Freeth, Dr Marilyn Hammick, Dr John Horder, Dr Ivan Koppel, Dr Anita McBride, Professor Geoff Meads, Ann Scott, Scott Reeves and Dr Margaret Sills for criticising this paper in draft and suggesting many improvements.

EXECUTIVE SUMMARY

The Learning and Teaching Support Network for Health Sciences and Practice commissioned this review from the UK Centre for the Advancement of Interprofessional Education (CAIPE) to help teachers[1] engage effectively in interprofessional education. The paper reviews arguments for shared learning for health and social care professions in the Government workforce and training strategy – collaboration, substitution and accelerated career progression – noting concern expressed by universities and their teachers to clarify ends and means.

Current issues are then approached from an historical perspective, tracing the development of interprofessional education since the sixties as one of several movements from which it is distinguished with difficulty. Developments that prompted interprofessional education include the formation of primary care teams, the introduction of care in the community, investigations into child abuse and, later, strategies to effect change and quality improvement. Examples are given of work and college-based interprofessional education before and after qualification designed to modify attitudes, secure common foundations and competency-based outcomes.

Application of adult learning principles leads into theoretical perspectives, which inform the choice of interactive learning methods. Theories from anthropology, social psychology and sociology help understand collaboration and obstacles that impede it. The re-framing of curricula is reported and moves to determine outcomes as occupational standards and benchmarks.

Surveys by CAIPE, the Committee of Vice Chancellors and Principals (CVCP) and others describe interprofessional education nationwide, complemented by reviews and systematic searches of the literature to assemble the emerging evidence base. Dimensions are identified, a provisional typology floated and principles formulated for interprofessional education.

Priorities identified for future research and development in interprofessional education include:

- Completing work to establish the evidence base, so far as practicable, from existing sources
- Setting and regulating standards
- Evaluating selected programmes
- Comparing experience of interprofessional education in different fields
- Preparing the next generation of teachers
- Weighing the implications of National Service Frameworks
- Building interactive learning into undergraduate interprofessional education
- Involving university teachers in work-based interprofessional education

[1] "Teacher" is used throughout this paper to include lecturers, clinical supervisors, practice teachers and tutors as appropriate.

- Designing a continuum of professional, multiprofessional and interprofessional education
- Relating objectives for shared learning to workforce planning

The paper focuses upon interprofessional education in the UK with reference to all four countries, but stopping short of discussion of policies and practices in each. An international review (Barr, 2000) can be found on the CAIPE website (www.caipe.org.uk) while the Journal of Interprofessional Care[2] covers collaboration in education, practice and research worldwide.

1. Introduction

Interprofessional education has been invoked ever more frequently during the past thirty years to encourage collaboration in health and social care to help improve services, effect change and, latterly, implement workforce strategies. Expectations have been raised and objectives added with each succeeding wave of development, introduced for other reasons unsupported by adequate argument and evidence and caught up in wider moves towards shared learning. Definition has been lacking, semantics bewildering, evaluations few and the evidence base elusive. Small wonder teachers are uneasy.

Determined efforts have, however, been made in recent years to define terms,[4] unravel semantics, develop rationale, refine methodologies for evaluation and secure evidence and theoretical bases as reported below. CAIPE and its members, including universities and their teachers, have been heavily committed to these endeavours in association with the Interprofessional Education Joint Evaluation Team (JET), the Editorial Board of the Journal of Interprofessional Care and the Learning for Partnership Network.

This paper is addressed to teachers who already have a working knowledge of interprofessional education and are ready to probe more deeply. It aims to help them build future developments on past experience informed, where possible, by theoretical

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[2] An independent peer reviewed journal about collaboration in education, practice and research in health and social care worldwide published six times per year by Taylor & Francis in association with CAIPE. For further information see the CAIPE website www.caipe.org.uk

[4] Definitions

Multiprofessional education:
Occasions when two or more professions learn side by side for whatever reason.

Interprofessional education:
Occasions when two or more professions learn from and about each other to improve collaboration and the quality of care.

(CAIPE, 1997 revised)

For further discussion, see Section 8.

perspectives and findings from research and alive to current issues. Sources tapped are often inaccessible, many coming from the grey literature. These are summarised for the benefit of readers who lack time or opportunity to consult the documents, while saying enough to enable scholars and researchers to judge for themselves which to consult in the original.

The story is told through the literature, resisting the temptation to gild the lily. Much remains to be done to build on the foundations laid.

Teachers new to interprofessional education may prefer to begin by reading introductory texts such as Barr (1994) and Low and Weinstein (2000).

2. Policies and Purposes

The NHS Plan (Secretary of State for Health, 2000) calls for partnership and co-operation at all levels to ensure a seamless service of patient centred care. A "new core curriculum" will give everyone working in the NHS the skills and knowledge to respond effectively to the individual needs of patients with "new joint training across professions in communication skills and in NHS principles and organisation". A "new common foundation programme" will "be put in place to enable students and staff to switch careers and training paths more easily".

These propositions are spelt out in the NHS workforce strategy (Department of Health, 2000) which calls for education and training which is "genuinely multi-professional" to promote:

- Teamwork
- Partnership and collaboration between professions, between agencies and with patients
- Skill mix and flexible working between professions
- Opportunities to switch training pathways to expedite career progression
- New types of worker

Education and training, says the Department, should be developed in partnership between the NHS and providers to maximize the contribution of staff to patient care employing a holistic approach.

Responses from universities

The Committee of Vice Chancellors and Principals (CVCP, 2000) welcomed the document, but with reservations. The task of Higher Education Institutions, it said, was to provide a style of education (as distinct from training) that enabled health care professionals to broaden their perspectives beyond their own specialist area, and to learn to draw on the expertise and approaches of other specialisms and disciplines, as necessary. Team working, integration and workforce flexibility could only be achieved if there was widespread recognition and respect for the specialist base of each profession. The Committee noted the lack of a definition of "multi-professional education" in the workforce document. Whilst it had developed a policy statement for "inter-professional education" (CVCP, 1996) and regarded it as a priority area, it would be impossible for higher education to determine priorities until the definition had been settled.

Finch (2000) argued that universities must comprehend interprofessional education before they could embrace it. Definitions were unclear and objectives several. Universities needed a clearer view of what interprofessional working within the Health Service would really mean before they could develop pedagogical approaches to underpin it.

Was the object for students:
1. to know about the roles of other professions?
2. to be able to work with those others?
3 to be able to substitute for others?
4. to find flexible career pathways?

The first of these, said Finch, was the least threatening and could be incorporated readily into curricula. The second could be helped by education and training, in her view preferably after rather than before registration. The third challenged established working practices in the NHS; education could not lead lest students be prepared for a working world that did not exist. The fourth called for flexibility in education planning and provision, with which universities were familiar, but depended upon support from accreditation bodies. Each of these propositions carried different implications for education and training. Universities should be invited to think laterally about how best to support NHS objectives once these had been clarified.

Following up the NHS Plan, the Department of Health (2001) affirmed its commitment to the development of "common learning programmes" for all health professionals by driving forward "multi-disciplinary education" which universities would be expected to put at the top of their agenda. All health professionals should expect their education and training to include common learning with other professions at every stage from pre-registration courses throughout continuing professional development. To that end, a partnership statement had been agreed between the NHS Executive and the CVCP (2000) "to provide a long-term, stable basis for the relationship between the NHS and higher education" including a shared commitment to the development and expansion of "inter-professional education", "flexible pathways" and "joint careers initiatives".

The workforce strategy is part of a package of reforms in education and training for health and social care. New regulatory bodies are replacing old. The Quality Assurance Agency (QAA) is taking responsibility for professional as well as the academic review of programmes, while workforce development confederations have replaced education consortia.

Reactions by teachers

"Multi-professional education" loomed large in the preliminary analysis of learning and teaching issues conducted by the LTSN for Health Sciences and Practice (2001). Respondents were worried about moves towards a generic health care worker (c.f. Schofield, 1995). Some questioned the motive for multi-professional education, suspecting that it was cost cutting rather than enhancing patient care through professions developing understanding of each other's roles and thereby improving collaborative working. The emphasis should, they argued, be on learning in small groups enabling professions to interact with each other and share perspectives. Communication skills and teamwork were ranked highly as important cross-curricula themes.

Opinions differed about the optimum time to introduce shared learning. Whilst such learning could be beneficial during pre-registration courses, some respondents feared that this would undermine the development of profession specific knowledge bases and noted that curriculum requirements by professional and statutory bodies made it difficult to find space to incorporate additional shared modules. This, said respondents, was exacerbated by time tabling problems, especially to enable students following different courses to meet during practice learning. More research was needed, they said, about ways in which higher education institutions were implementing multi-professional education along with an evaluation of its effectiveness.

3. Motives and Movements

The interprofessional education movement in the UK began in the sixties. More precisely, a succession of discrete "initiatives" occurred which, with benefit of hindsight, can be seen to have been the beginnings of parallel interprofessional movements in different fields of practice with the same objective, namely to improve working relations amongst health, social care and sometimes other professions. To the extent that those movements have been drawn together, we may speak of the interprofessional education movement.

That movement is, however, one of several that brought, and continue to bring, professions together to share learning, movements from which interprofessional education can be distinguished conceptually, but operationally with difficulty.

Contributory movements

Health and social care workers enrol for programmes that cut across professions. Some programmes relate to academic disciplines and practice, e.g. gerontology. Others promote models of care, e.g. in mental health and learning disabilities. Yet others introduce new practice methods, e.g. counselling, or enable practitioners to transfer into another field, e.g. public health, education, management or research. Each can be seen as a movement contributing to different fields of professional education.

Collective movements

Four `collective movements` can be identified in pre-registration studies. Two of these – for social work and nursing - drew related professions together to share all or part of their courses. The third – for the professions allied to medicine – drew them into a common regulatory and disciplinary framework with some shared studies. The fourth and most recent – for the complementary therapies – draws them into a common academic framework, again with some shared learning (Barr, 1999).

These movements have much the same motives - to improve practice and patient care, enhance professional status, gain collective strength and secure a place in higher education. Each benefits from the rigours of validation, the systematic assessment of students informed by the health and social sciences in universities, which have paved the way for the award of academic diplomas and degrees to complement professional qualifications.

The generic movement in social work was the first. It dates back to the fifties when a combined qualifying course for childcare and probation was launched at the London School of Economics. Others followed, generic courses becoming the norm in response to recommendations in the Seebohm Report (1969) and the subsequent formation of the Central Council for Education and Training in Social Work (CCETSW) (Younghusband, 1978). The driving force was to establish a corporate professional identity with a common value base, a common code of practice and a coherent repertoire of practice methods informed by the behavioural and social sciences and law as contributory disciplines.

Like social work, nursing was perceived as a semi-profession (Etzioni, 1969) intent upon enhancing its collective status in the eyes of other professions and the public by improving its education and strengthening its institutions (DHSS, 1972; Robinson, 1993). Project 2000 (UKCC, 1986) recommended that education should be separated from service and that pre-registration courses for the different branches of nursing be integrated and brought into universities.

While the social work and nursing movements brought together professions that had much in common, the third movement brought together a heterogeneous collection of small "professions allied to medicine" (PAMs). The object was not primarily to integrate courses (although some common learning resulted), but to establish a single regulatory framework under the Council for Professions Supplementary to Medicine (CPSM) to secure standards, improve practice, upgrade qualifications and advance collective status.

The fourth of these movements is still in its formative stages. The complementary and alternative therapies (CAMs), like the PAMs, comprise many small professions thrown together by accident of history. Their functions and identities remain distinct although they share more or less the same philosophy. Progress towards regulation differs. So do efforts to secure evidence bases for practice. Some are subject to regulation by professional institutions as they secure their evidence bases, move into the mainstream of higher education and enhance their status.

Each of these four movements in its formative stage resembles the interprofessional movement insofar as strengthening relations between the participant professions is critical to success. That stage has passed for the first two movements, as progress has been made towards establishing collective identities, a single profession for social work, twin professions for nursing with midwifery. Comparable integration is neither desirable nor feasible for the PAMs and CAMs, given the diversity of their functions and methods. Cultivating collaboration between the constituent professions is, however, high on the agenda for both of these movements. Each may therefore be regarded as `a closed system interprofessional movement` in much the same way as the social work and nursing movements were previously.

While each movement remains preoccupied with relations between the participant professions and their collective self-interest, it lacks time, energy or inclination to

cultivate relations with professions more widely. Readiness to build alliances with other professions depends upon first securing the goals set by the movement. Viewed thus, it is a mark of maturity that social work, nursing and midwifery and the allied health professions are now engaged in the wider interprofessional education movement.

Medicine, dentistry and pharmacy lie outside these movements, each having already established its professional credentials, knowledge base and place in higher education.

Whilst the collective movements were bringing other professions closer together, medicine was establishing ever more specialist fields in response to growth in scientific knowledge and technological advance. Time and energy, as one senior doctor explained to the writer, was necessarily absorbed in the maintenance of working relations between branches of the profession to the detriment of relations with other professions (Barr, 1994). Those professions created specialist fields to complement those in medicine, again taking time and energy for intra-professional relations at the expense of interprofessional relations. Whatever the many benefits of specialisation, the case became compelling for the rationalisation of the number of professions and specialties, and by the cultivation of better working relations between them.

Developments in general practice counterbalanced specialisation in other fields of medicine and became the point of reference for much of the development of collaboration with other professions. The Royal College of General Practitioners was noteworthy for the lead that it gave as it joined in conference with the other professions and published interprofessional reports (see, for example, Jones, 1986; Gregson et al, 1991). Distinguished members of the College were, and remain, prominent in promoting and developing the interprofessional education movement to which we now turn.

The interprofessional education movement

Interprofessional education was conceived as a means to overcome ignorance and prejudice amongst health and social care professions. By learning together the professions would work more effectively together and thereby improve the quality of care for patients. They would understand each other better, valuing what each brought to collaborative practice whilst setting aside negative stereotypes.

The need for this was more apparent in primary and community care than secondary care, primary care where many GPs had formed group practices and were recruiting other professions - district nurses, health visitors and sometimes social workers - into their teams, in community care as long-stay hospitals began to close.

Highly vulnerable and institutionalised patients were being discharged, whose survival in the outside world depended upon flexible, responsive and well co-ordinated support from community mental health and mental handicap teams. Rigid demarcations and hierarchical relationships which may have worked well enough in hospitals had no place in community-based services where boundaries between professions needed to be more permeable. As relationships became more flexible, risk of territorial disputes increased.

For mental health, efforts to improve collaboration went hand in hand with those to promote a new model of care. The same was true in mental handicap (as the field of learning difficulties was then called) where moves were afoot to retrain staff to be re-deployed from hospital to community and to replace nursing awards by social care awards (Jay, 1979). In these and other fields of community care, e.g. palliative care, HIV/AIDs and the care for the frail elderly in the community, interprofessional education contributed to efforts to improve the quality of long-term care.

Teamwork had arrived in both primary and community care, teamwork which could be either frustrated by rivalry and miscommunication or become a mutual learning experience through which each profession understood better what the others could contribute in a spirit of trust and mutual support.

Community and primary care were treated as one in the earliest reports about interprofessional education, but the distinction between them became an issue following the creation of social services departments in the wake of the Seebohm Report (1969). Conferences explored ways in which interprofessional education might help to heal the bureaucratic rift between GPs and social workers (see, for example, England, 1979; Barr, 2002).

Meanwhile, the enquiry into the death of Maria Colwell (Colwell Report, 1974), like others later, pointed to failures in communication between professions – health visitors, doctors, social workers, teachers and police officers – in reporting warning signs and acting soon enough to prevent abuse and sometimes death of children. Concern led to the creation of Area Child Protection Committees whose brief included the promotion of joint training to improve communication and collaboration. Local initiatives were complemented by nationwide programmes (Charles and Hendry, 2000).

Early "initiatives" in interprofessional education were isolated, reactive and often short-lived. Many were work-based and lost in the mists of time, but some are on the record. Jones, for example, reported on "novice days" in Devon where newly-appointed nurses, health visitors, social workers, GPs and therapists learned how to appreciate what each other brought to community-based practice (Jones, 1986). The first initiative took place in a medical setting and was built around log diaries. Outcomes were the opposite of those expected. Confidence expressed by the other professions in doctors' ability to do everything reportedly increased. The doctors, however, placed less confidence in the other professions. Subsequent workshops were relocated to a nursing setting and the programme radically revised with reciprocal presentations. Feedback was more positive. Doctors, health visitors and therapists reportedly appreciated the roles and skills of social workers better, doctors also the roles and skills of nurses better and social workers those of health visitors.

Other initiatives were college-based, either before or after qualification. Conventional wisdom had long held that interprofessional education was better left until after qualification, by which time workers would have secured their professional identities and

have experience to share. Joint qualifying studies were nevertheless reported during the seventies (Mortimer, 1979).

Hasler and Klinger (1976) described a residential course for trainee GPs and student health visitors designed to introduce each group to the other, modify attitudes, increase knowledge of each other's work and induce a positive approach to teamwork. Most of the three days were spent in discussion in small groups augmented by guest speakers. Assessment took the form of questionnaires completed by participants including the identification of situations where each profession could help the other.

Teachers at Moray House in Edinburgh found that students entering qualifying courses in community work, social work and primary education already held prejudices about each other, prejudices reinforced by the time they finished their courses. They tried one interactive method after another to provoke exchange between the student groups in the hope that negative stereotypes would shift in a positive direction (McMicheal and Gilloran, 1984; McMichael et al. 1984 a&b) with variable success.

Two Moray House initiatives were evaluated. The first was a common course in psychology built around interactive workshops. Questionnaires before and afterwards compared attitudes held by the three professional groups towards each other. Only a quarter of the students reported any change in attitude towards the other groups. Student teachers became more positive toward student community workers and social workers, but this was not reciprocated. Staff attributed these disappointing findings to the limited duration of the learning together, the large group and the imbalance in numbers from each profession.

The second included the same mix of professions. Students worked in small groups where they discussed a video about communication problems, a case study, work priorities, a do-it-yourself collaborative project and the management of conflict. Student teachers developed greater awareness of how social workers could help them in their work, but this did not extend to community workers. For their part, student community workers and social workers remained critical of primary education, but became more aware of some of the teachers' frustrations.

In Bristol medical and social work students came together in one initiative, medical and nursing students in another, during the latter stages of their pre-registration courses (Carpenter 1995a&b; Carpenter and Hewstone, 1996; Hewstone, 1996; Hewstone et al, 1994). Learning during the first of these initiatives included joint assessments of patients and video case studies. Before and after questionnaires evaluated students' perceptions of the learning by their own group and the other. Medical and social work students started by being more positive about their group than the other, but attitudes towards the latter improved. Learning during the second initiative was again based upon a video, pairs from each profession discussing what they had observed and reporting back. Attitudes towards the other profession changed for the better during the learning, but those of nurses towards doctors did so more than of doctors towards nurses. Comparing the two projects,

the researchers noted that the doctors had improved their academic rating of social workers, but not of nurses.

Practice learning came to be seen as a promising setting for interprofessional education, notably in Thamesmead (Jacques, 1986) where student doctors, health visitors and social workers on placement took part during lunch time gatherings in role plays, case discussions and games that simulated collaboration. Convinced of its importance, the Central Council for Education and Training in Social Work, the English National Board for Nursing, Midwifery and Health Visiting and the College of Occupational Therapists launched a rolling programme to prepare practice teachers and clinical supervisors (Bartholomew et al. 1995; Brown, 1993; Weinstein, 1997).

Exeter claimed credit for launching the first masters programme designed to cultivate collaboration, although the primary objective was to underpin practice for nurses and the allied health professionals with firmer academic and research foundations (Pereira Gray et al. 1993). Other masters courses followed where experienced practitioners from different professions were introduced to new models of care, practice methods and academic disciplines, but opportunities also developed for collaborative learning between professions to inform collaboration in practice (Storrie, 1992).

Interprofessional education was becoming less reactive and remedial, more proactive and preventive. The Health Education Authority (HEA), for example, mounted a travelling circus of nation-wide workshops attended by triads from primary health care teams, each of which chose a health promotion project to develop and implement subsequently (Lambert, 1988; Spratley, 1990a&b). The effect was not only to reinforce health promotion in primary care, but also teamwork. Many of the freelance trainers who ran the HEA workshops were hired subsequently by primary care teams to facilitate development.

Interprofessional education was being invoked to help effect change, to implement policies and legislation, for example, in child care and community care, as workers from different professions and agencies learned together about proposals and weighed implications for their roles and relationships.

Collective learning was reinforced in primary care by the Calman Report (1998) which recommended Practice Professional Development Plans to develop each primary care centre as a human resource for health care and to increase capacity for quality development. These provide a way to plan the integration of organisational development in general practice with the personal educational needs of team members (Carlisle et al. 2000)

None of the movements described would have developed as they did save for underlying trends in higher and vocational education working in their favour. Independent schools for the separate health professions were being integrated into the mainstream of higher education, as leadership in some passed from profession-specific teachers to generalist educational managers disposed to look for common curricula to rationalise programmes and gain economies of scale in cost-conscious times. Modularisation helped in

remodeling curricula to combine common elements across professions. So too did open and distance learning materials whose production costs (save for nursing) could only be borne by attracting students from a range of professions and lay people. These trends were reinforced insofar as grants from the Higher Education Funding Council and Education Consortia (later Workforce Development Confederations) pursued organisational goals that cut across professions.

Interprofessional education has developed over the years:

- To modify negative attitudes and perceptions (Carpenter, 1995)
- To remedy failures in trust and communication between professions (Carpenter, 1995)
- To reinforce collaborative competence (Barr, 1998)
- To secure collaboration
  - to implement policies (Department of Health, 2001)
  - to improve services (Wilcock and Headrick, 2000)
  - to effect change (Engel, 2000)
- To cope with problems that exceed the capacity of any one profession (Casto and Julia, 1994)
- To enhance job satisfaction and ease stress (Barr et al. 1998; McGrath, 1991)
- To create a more flexible workforce (Department of Health, 2000)
- To counter reductionism and fragmentation as professions proliferate in response to technological advance (Gyamarti 1986)
- To integrate specialist and holistic care (Gyamarti 1986)

It has worked to restore equilibrium as working relationships have been destabilised, the unquestioned authority once enjoyed by the established professions challenged, hierarchies flattened and demarcations blurred, as new professions have grown in influence, consumers have gained power, and a better informed public has expected more

4. Content and Outcomes

Re-framing curricula

Glen (2001) made the case for integrated curricula. Szasz, she said, had voiced concern during the sixties about the adverse effects of separatist and competitive culture resulting from academically, and often geographically, separate health care education programmes (Szasz, 1969). He had advocated 'integrated curricula' to counter the compartmentalisation of knowledge (Cable, 2000).

Bernstein (1971) reported outcomes of moves towards an integrated curriculum, which created opportunities to make active connections between different subject matter in the interest of relevance to practice. Hammick (1998) demonstrated how Bernstein's distinction between 'singular discourses', such as biology and psychology, and 'regionalisation of knowledge', as in medicine and nursing (Bernstein, 1996), can be used to reframe professional into interprofessional curricula.

Beattie (1995) argued that integrated curricula could provide powerful opportunities to transcend the tribalism of the health professions, while Barnett (1999) saw the trend toward integrated curricula as vital to the cognitive development of students who would be required to respond flexibly to the needs of communities, families and individuals. A liberal conception of higher education could not be sustained amidst barriers to students' intellectual inclinations.

The aims of "transdisciplinary education", said Barnett, were:

> **Educational** – offering a broadening dimension through integration of elements, developing relationships between learning and actual 'life' situations.
>
> **Epistemological** – contrasting conceptual frameworks, truth criteria, level of objectivity and methodologies, creating a context for new kinds of thinking
>
> **Pedagogical** – encouraging co-operation among education staff of different disciplines and exposing students to a wider range of teaching strategies
>
> **Normative** – offering education as a vehicle which puts knowledge into service for political and social reforms
>
> **Rational** – unifying reasoning around a particular theme to create a supra-rationality, for example, health
>
> **Critical** – developing the capacity to challenge central suppositions and the interest to understand the structure of a particular discipline

Tope (1996) analysed the content of pre-registration programmes for 13 professions in South Wales - dental hygiene, dental technology, dentistry, dietetics, medicine, nursing, nutrition, occupational therapy, operating department practice, physiotherapy, podiatry, social work, speech therapy and radiography. The outcome was a list of 116 items, ranging from "ageing" to "writing reports" whose presence or absence was then charted for each programme. Some, such as "group dynamics", "listening skills" and "verbal communications" were found in all programmes, others in the majority.

Invited to identify subjects suitable for "interdisciplinary learning", 80% or more of the teachers included each of the following - psychology, sociology, ethics, law and practice, research methods, management, economics of health and social care, health promotion, study skills, quality issues, structural problems and computing skills. Headings were taken at face value without reference to the level at which subjects were taught, schools of thought favoured by one profession or another, or application to different fields of practice.

Outcomes and competency

There has been a shift of emphasis from re-framing content to formulating outcomes. National Occupational Standards drawn up for health and care professions provide a

common language, assist dialogue, promote collaboration and inform interprofessional learning (Mitchell et al. 1998: Weinstein, 1998).

These included the following competencies deemed to be necessary for effective collaborative working (summarised by Barr, 1998):

- Contribute to the development and knowledge of others
- Enable practitioners and agencies to work collaboratively
- Develop, sustain and evaluate collaborative approaches
- Contribute to joint planning, implementation, monitoring and review
- Coordinate an interdisciplinary team
- Provide assessment of needs so that others can take action
- Evaluate the outcome of another practitioner's assessment

Healthwork UK has published no fewer than 30 sets of National Occupational Standards for community work and health promotion and care (Healthwork UK 2001a&b). These and others in preparation would merit analysis to tease out implications for interprofessional education and practice.

Steps have been taken by the Quality Assurance Agency (QAA) to agree benchmarks, i.e. statements describing the nature and standards of study, for pre-registration programmes for nursing and midwifery, and for the professions allied to medicine following extensive and continuing consultation with stakeholders (QAA, 2001).

These statements are divided into key concepts deemed to be common to all health care professionals and profession specific statements for nursing, midwifery, health visiting, dietetics, speech therapy, chiropody/podiatry, prosthetics and orthotics, occupational therapy, orthoptics, physiotherapy and radiography. Statements referring to collaboration are listed in the Appendix.

The QAA has also published benchmarking statements for social work (QAA, 2000). These are described as academic standards (unlike those for the health professions which include practice standards) treating social work as an applied social science. Reference is made to work by the Training Organisation for the Personal Social Services (TOPSS) to develop occupational standards for health and social care. Despite the strength of the link between academic and practice awards in social work, the benchmarking statements do not attempt to define professional competence, which, said the report, could only be undertaken in partnership with other stakeholders.

The statements acknowledge at the outset that social work commonly takes place in an inter-agency context and that social workers habitually work collaboratively with others towards inter-disciplinary and cross-professional objectives. Programmes should therefore equip students with accurate knowledge about the respective responsibility of welfare agencies and with skills in effective collaborative practice between these. Again, statements bearing upon collaboration are listed in the Appendix.

Consultations were in progress to compare benchmarking statements for health, medical and social work professions. These may result in a greater degree of coherence in form and content with common statement applicable across professions within which those relevant to collaborative practice may be identified.

Work remains to be done to relate national occupational standards and benchmarking, and to decide whether to formulate competence-based outcomes (which many of the existing statements resemble).

Competence-based models of interprofessional education have been floated. Some formulated knowledge, skill and attitudes or values deemed to be necessary for collaborative practice (CCETSW, 1992; Jarvis, 1983; Kane, 1976; Stevens and Campion, 1994; Vanclay, 1996; Whittington et al. 1994), others competencies necessary to effect change (Engel,1994; Rawson, 1994). Beresford and Trevillion (1995) called for skills in creativity, imagination and innovation, Spratley and Pietroni (1994) for a balance between flexibility and creativity, on the one hand, and skills in communication and group working, on the other. Hager and Gonczi (1996) regarded formulations like these as a 'richer conception' of competence which is 'holistic' not 'atomistic'.

Jones and Joss (1995) devised a cyclical model from the work of Kolb (1984), Gibbs (1988) and Schon (1987) to distinguish between types of competence required at experiential, reflective and conceptual stages. Others distinguish between competencies at different levels (Engel, 1994; Hager and Gonczi, 1996; Hornby; 1993). Based upon a European-wide Delphi study, Engel (2001) sets out competencies to be expected of newly qualified professional to adapt to and participate in the management of change.

Barr (1998) distinguished between:
Common competencies – those held in common between all professions
Complementary competencies – those that distinguish one profession from another
Collaborative competencies – those necessary to work effectively with others

Examples of collaborative competencies, Barr suggested, were ability to:

- Describe one's roles and responsibilities clearly to other professions and discharge them to the satisfaction of those others
- Recognise and observe the constraints of one's role, responsibilities and competence yet perceive needs in a wider context
- Recognise and respect the roles, responsibilities and competence of other professions in relation to one's own, knowing when, where and how to involve those others through agreed channels
- Work with other professions to review services, effect change, improve standards, solve problems and resolve conflict in the provision of care and treatment
- Work with other professions to assess, plan, provide and review care for individual patients and support carers
- Tolerate differences, misunderstandings, ambiguities, shortcomings and unilateral change in another profession

- Enter into interdependent relationships, teaching and sustaining other professions and learning from and being sustained by those other professions
- Facilitate interprofessional case conferences, meetings, team working and networking.

A project commissioned by the West Yorkshire Workforce Development Confederation (University of Leeds, 2001) drafted core competencies for clinical teams as follows, each of which is broken down into detailed statements:

- Establish and maintain effective relationships with patients and/or carers
- Establish and maintain team delivery
- Identify and understand others' concerns and modify own response to build credibility, mutual respect and trust
- Contribute to the process of continuous improvement in patient care

5. Theory and Practice

Reports on interprofessional education tend to be light on theory, theoretical perspectives coming from a limited number of sources whose wider adoption may lie in the future. Some of the theories inform the learning, others the practice for which the learning prepares the students and some both.

Adult learning

Interprofessional education is grounded in adult learning theory. According to Parsell et al (1998), many professional educators believe that learners need to become self-directed, critical thinkers and reflective practitioners, able to function as members of teams, good communicators, adaptable to change and continuing to learn throughout their professional lives. Towards those ends, interprofessional curricula had, they said, been strongly influenced by the ideas of Knowles (1975, 1985 and 1990), Boud (1988), Kolb (1984) and Schon (1983, 1987 and 1991).

Adult learners are intrinsically motivated. They learn more permanently and more deeply when knowledge has direct and early application to practice, and more effectively using a range of learning opportunities involving task-centred or problem-based approaches (Knowles, 1975). Adult learning occurs within an integrated four stage cycle (Kolb, 1984) including reflection. Reflective practice, as expounded by Schon, invites participants to observe and reflect employing intuition and experience, setting aside preconceived theory derived from their respective professional backgrounds and employing a common learning process. Interprofessional learning involves co-reflection like a double mirror (such as hairdressers use) held up by another to see aspects of oneself that one cannot see directly in a single mirror (Wee, 1997).

Cable (2000) saw adult learning in interprofessional education as active (Bruner, 1966), experiential (Kolb, 1984), reflective (Schon, 1983 and 1987) and contextual (Coles, 1990) modeling good practice (Bandura, 1972; Belbin, 1993) and relating the personal to the professional (Ash, 1994). He applied theories of situated learning to interprofessional education and practice, learning which has as its focus the relationship to the social

situations in which it occurs and takes place within a framework of social participation rather than the individual's mind. Learning and performance, said Cable, cannot be separated because learning is performance and the meaning of the activities that occur are a constantly negotiated and re-negotiated interpretation of those held by all the participants of the world in which they practice (Lave and Wenger, 1991; Elkjaer, 1999).

The 'contact hypothesis' (Tajfel, 1981) informed design and learning methods in early college-based initiatives in Edinburgh and Bristol (see page 11 &12). It holds that people respond positively to those who are rewarding to them. Mere exposure (Zajonc, 1968) is not enough. Familiarity alone does not necessarily lead to liking; other factors may negate its positive influence (Berkowitz, 1980). Interprofessional education needs to create opportunities for rewarding interaction between students in their respective professional roles designed to improve mutual respect and understanding, and to modify negative stereotypes, in ways that may be transferable to others from the same professions.

Success depends according to Hewstone and Brown (1986) upon:

- institutional support
- equal status of participants
- positive expectations
- a co-operative atmosphere
- successful joint working
- concern for and understanding of differences as well as similarities
- perceiving other members as typical of the other group

Account must be taken of the possibility that contact with another profession may confirm reality-based negative perceptions that an isolated education experience can do little or nothing to change. No matter how good the interprofessional learning, assumptions, attitudes and practices in the workplace can frustrate interprofessional practice. Interprofessional education must therefore be part of a package of measures designed to improve working relations in practice.

Evaluating interprofessional masters programme in mental health at the University of Birmingham, Barnes, Carpenter and Dickinson (2000) found that attitudes held by the students changed little during the course. They attributed this to lack of opportunity to explore differences deemed necessary for the contact hypothesis to take effect. Whilst it would be unsafe to generalise from a small sample in just one programme, the implication is clear, namely that interprofessional education based exclusively upon common learning may fail to deliver improvements in reciprocal attitudes and perceptions conducive to better working relationships.

Theories such as these may lie behind teachers' preference (Barr, 1994) for interactive rather than didactic learning methods in interprofessional education, which have been classified as follows (Barr: 1996):

Exchange-based learning
These are methods that encourage participants to express views, exchange experience and expose prejudice, including debates on ethical issues, games to loosen up relationships and case studies to compare assessments, treatment plans and respective roles (McMichael et al, 1984).

Action-based learning
This includes *problem based learning* (Barrows and Tamblin, 1980) as commended by the World Health Organization (WHO, 1988) and widely adopted in interprofessional education in the UK, for example, at Salford (Hughes and Lucas, 1997), but extends wider. It also covers methods of investigation and co-working such as collaborative enquiry (Reason, 1994; Glennie and Cosier, 1994) and continuous quality improvement (Wilcock and Headrick, 2000) introduced to enable students from different professions to combine their expertise to investigate questions and effect change.

Observation-based learning
Drawing upon psychodynamic observation (Likierman, 1997; Hinshelwood and Skogstad, 2000), one example of such learning is joint visits to a patient or client by students from different professions, to make an assessment to be fed back to the group with opportunities to compare perspectives and perceptions facilitated by the teacher. Another is shadowing where experienced students, for example on part-time postgraduate programmes, visit each other at their regular place of work, again followed by feedback and de-briefing by the group (Reeves, 2000).

Models for the observation of babies and young children in training psychotherapists have been adopted and adapted to cover wider age groups as well as work settings, introducing psychodynamic insights and employing reflective practice (Adler and Adler, 1994).

Simulation-based learning
Role-play can enable relationships between professions to be explored as participants take different parts in imagined situations. Games have also been produced where students are assigned roles, competing and collaborating to meet stated objectives (see, for example, Rowley and Welsh, 1994).

Skills labs create life-like situations where students from different professions may learn together (Freeth and Nicol, 1998; Nicol and de Santioge, 2002; Studdy et al. 1994).

Some universities have introduced group-based experiential learning, for example, the University of Westminster has a week-long module in conjunction with the Tavistock Centre and latterly the Tavistock Institute to simulate personal, group, inter-group and organisation relationships in working life (Stokes, 1992 & 1994).

Practice-based learning
A student from one profession may be placed with workers from another (Anderson et al, 1992). Two or more students from different professions may be assigned to the same community-based placements, although logistics can be problematic (Cook et al, 2001).
Training wards have been established where students from different professions learn together as they share responsibility for day-to-day management (Fallsberg and Hammer, 2000; Fallsberg and Wijma, 1999; and Reeves and Freeth, 2002).

Didactic teaching has its place to provide structured inputs and systematic knowledge, but used sparingly to complement and reinforce interactive learning.

Attitudes and Perceptions
Hind and his colleagues (Hind et al. 2003) introduced three theories from social psychology to help understand the complexity of interprofessional relations in health care. Realistic conflict theory (RCT) (Brown et al. 1986; Spears et al, 1997) predicts that groups holding divergent objectives will have hostile and discriminatory inter-group relations whereas groups with common objectives will display conciliatory behaviour. Social identity theory (SIT) developed by Tajfel, Turner and colleagues (Turner 1999; Ellemers et al, 1999) proposes that part of a person's self-concept is based upon identity as a member of groups to which he or she belongs. Self-categorization theory (SCT) builds upon SIT retaining concepts of self and group, but not as bipolar (Turner, 1999). Hind and his colleagues give examples of the application of SIT and SCT to study interprofessional education and practice, including their own work.

Meads et al (2000) employed 'relationship profiling' to capture reciprocal perceptions between health authorities and primary care organisations as a focus for reflection about relational strengths, weakness and developmental needs. Lead personnel in each organisation completed a profile questionnaire based upon five themes:

- Commonality – valuing similarity and difference
- Parity – use and abuse of power
- Multiplexity – breadth of knowledge
- Continuity – shared time over time
- Directness – the quality of the communication process

Values and ethics
Interactive learning deals in reciprocal attitudes and perceptions that express underlying values rooted in differences in gender, income, social class, education, practice autonomy and public esteem between professions (Carrier and Kendall, 1995 citing Braye and Preston Shoot, 1995; Rogers and Pilgrim 1996). These differences feed stereotypes (Pietroni, 1996), which impede working relations and result in lack of confidence, trust and willingness to share information, endorsed when one profession is perceived to have a weaker professional code and disciplinary process than another.

Interprofessional education provides a forum where values and ethical issues can be debated (McMichael et al, 1984). It has also begun to secure its own value base written

into ground rules that respect differences in age, race, religion gender and sexual orientation, and accord parity of esteem - however wide the status differences may remain in the workplace (Weinstein, 2000).

Work for Presidents and Chief Executives of Health Regulatory Bodies says that all health care professionals are personally accountable for their decisions and actions (UKCC, 2001a). To that end, they must be:

- Open with patients and clients and show respect for their dignity, individuality and privacy, and for their right to make decisions about their treatment and health care
- Justify public trust and confidence by being honest and trustworthy
- Act quickly to protect patients, clients and colleagues from risk of harm
- Provide a good standard of practice and care
- Co-operate with colleagues from their own and other professions

Steps have also been taken to establish an ethical code to which all health and social care professions may come to subscribe (Berwick et al. 1997) developed by an Anglo-American interprofessional group around the following principles (Berwick et al 2001):

Rights – people have a right to health and health care
Balance – care of individual patients is central, but the health of populations is also our concern
Comprehensiveness – in addition to treating illness, we have an obligation to ease suffering, minimise disability, prevent disease and promote health
Cooperation – health care succeeds only if we cooperate with those we serve, each other, and those in other sectors
Improvement – improving health care is a serious and continuing responsibility
Safety – do no harm
Openness – being open, honest and trustworthy is vital in health care

Teamworking and networking
Theoretical perspectives have been introduced into interprofessional education to inform understanding of collaborative practice.

Gregson and her colleagues (1991) adopted a five-stage taxonomy from Armitage (1983) - isolation, encounter, communication, partial collaboration and full collaboration - to analyse degrees of collaboration in primary care. Critical variables, they suggested, were physical proximity, social proximity and positive motivation. Collaboration, they said, was a fuzzy term, while teamwork had become a linguistic tool employed in ways that obscured the variety of its meanings.

Ovretveit (1996) selected five characteristics to describe teams - degree of integration, extent of collective responsibility, membership, client pathway and decision-making, and management structures. West and Field (1995) introduced perspectives from organisational psychology to understand processes in teamwork – problem solving, decision making and team building - as well as personality factors (see also West and Pillinger, 1996; West and Slater, 1996). In the United States, Drinka and her colleagues

demonstrated how different behavioural types affected performance in teams (Drinka et al, 1996; Drinka and Clark, 2000), while Schmitt (2000) contributed a wide-ranging critique of evaluations of teamwork in health care.

Networking may more aptly describe collaboration across agencies and working settings, although the notion is less defined and less tested than team working. But Engestrom questioned whether many collaborative activities fit standard definitions of team working or networking, as commonly understood within relatively stable structures. Given that many working relationships were constantly changing, they might be described more accurately as "knotworking" - tying, untying and retying otherwise separate threads of activity, which could not be reduced to any specific individual or fixed organisational entity as the centre of control. The centre did not hold. The locus of initiative changed from moment to moment. The knot needed to be made the focus of analysis (Engestrom, 1999a).

This metaphor draws upon "activity theory" and "expansive learning" (Engestrom,1999b&c). The latter, said Engestrom, challenged the proposition that acquisition of knowledge or skill was stable and well defined in the hands of a competent teacher. It recognised that people and organisations learned all the time in ways that were neither stable nor predetermined. Expansive visibilization was the processes by which work was made visible in both linear and socio-spatial dimensions using a cyclical model (c.f. Cable, page 17).

Systems, cooperation and social exchange

General systems theory (Bertalanffy, 1972) is one of three introduced by Loxley (1997) to help understand collaborative practice. It shifts perception from separate parts to processes of interaction through which they can be related. The whole is more than the sum of its parts, the combined benefits of intervention by the professions more than their separate contributions. The same goals can be achieved from different starting points either by health or social interventions (Clare and Corney, 1982). Systems thinking, said Loxley, informs the bio-psycho-social model (Engel, 1977) in physical and psychiatric care and, in interprofessional work, family therapy and behaviour modification.

Co-operation theory, said Loxley, seeks to establish the conditions that make co-operation possible between self-interested parties to make the optimum choice of strategy between conflicting interests to ensure the survival of the species (Axelrod, 1984). It assumes that the parties will co-operate for their own benefit and mutual gain. It carries the implication that the client should be an active, not passive, participant. Ideas from this theory can be found in the taxonomy of collaboration formulated by Gregson and her colleagues (Gregson et al, 1991).

Social exchange theory, said Loxley, holds that exchange is more than barter. It carries meaning beyond market value - reciprocity, obligation, indebtedness, self-interest and calculations of cost and benefit, all of which help in understanding collaboration as a medium of exchange that is more than co-operation.

Psychodynamic perspective
Understanding of organisational and group behaviour associated with Bion (Obholzer, 1994a&b) and developed by the Tavistock Centre and Institute has been introduced into interprofessional education.

Psychodynamic theory contributes insights into ways in which anxiety and stress result in rigid and defensive behaviour liable to impede collaboration when it is most needed. Recent work has underlined the relationship between 'task' and 'culture' in organisational life, i.e. the idea that the nature of an organisation's task profoundly influences the culture that forms and prevails within it (Hinshelwood, 2001). It can be discerned in working environments in health and social care, as clinical psychologists found when teaching of psychotherapy to junior doctors by clinical psychologists (Blackwell and Rimmer-Yehudai, 2001), but is often easiest to identify in high stress working environments such as acute or community-based psychiatry (Hinshelwood, 1998).

Hornby (1983 & 1993) explored how agency boundaries are protected when practitioners face anxiety and uncertainty about their capacity to cope with clients' needs as much as by suspicion entertained about the practice of their opposite numbers. Anxiety and conflict reinforces "socially organised defences" in the working environment which find expression in adherence to administrative and technical procedures, establishing attitudes, roles and relationships (Jacques, 1951 & 1955; Menzies Lyth, 1970). Anxiety was also central to the study by Woodhouse and Pengelly (1991) of the nature of working partnerships between practitioners working with the same clients with particular reference to conscious and unconscious interactive processes in marital counselling in a transference relationship where practitioners, like partners, become the objects of projection.

Professionalisation
Carrier and Kendall encapsulated the whole in a critique of the professionalisation process (Carrier and Kendall, 1995; Evetts 1999 citing Freidson and Krause, 1996). Professionalisation, they said, was positive when driven by concern to improve service to clients, negative when driven by pursuit of privilege underwritten by questionable claims to exclusive expertise. Motives were mixed – to provide service and use knowledge for economic gain. Esoteric knowledge and social distance reinforced virtuoso roles and impeded collaboration. From the left the professions were represented as middle-class or, worse, as integral parts of class dominance and inequality, from the right as conspiring to escape the liberating forces of the free market.

Formulating a theoretical framework
Diverse theoretical perspectives have been introduced into interprofessional education from a range of academic disciplines, in much the same way as diverse practice perspectives from a range of practice professions.

A general theory of interprofessional education may one day take shape. Meanwhile, its components may be identified thus:

> *the application of principles of adult learning to interactive, group-based learning that relates collaborative learning to collaborative practice within a coherent rationale informed by understanding of interpersonal, group, inter-group, organisational and inter-organisational relations and processes of professionalisation.*

6. Parts and Players

As conceived, the chief stakeholders in interprofessional education were the professions, whose needs to understand each other better were central. They remain the key players, but experience warns against a model of interprofessional education that may be too inward looking. That danger has been countered by moves towards a practice-led and patient-centred model where relationships between the professions are addressed in the context of problems to be resolved, changes to be made and improvements to be gained.

Patients and clients

Much lip service has been paid to involving patients and clients, or "service users", as co-participants and in the design, delivery and evaluation of professional and interprofessional education, but reported examples are few. Professional education stands accused by Beresford and Trevillion (1995) of discrimination against service users and carers by excluding them as trainers and practitioners. They offer a systematic approach to involve them in community care. Barnes and her colleagues (2000b) break new ground in their evaluation of ways in which services users and carers were involved in designing a programme and its evaluation. The former UKCC (2001b) asserted that the time had come to write patient participation into the definition of interprofessional education.

Professions

The professional mix differs, depending upon the field in which collaboration is deemed to be necessary. Child protection, for example, includes police officers and schoolteachers as much as health visitors, GPs, paediatricians and social workers, mental health psychologists as much as nurses, psychiatrists and social workers, and juvenile justice probation officers and youth workers. Clergy, community workers, housing officers and lawyers are just some of the other professions involved as occasion demands.

A working boundary must, however, be drawn (in reviews such as this) lest the subject becomes unmanageable. One criterion is the inclusion of at least one of a number of named health and social care profession.

Evaluations of interprofessional education frequently report differences between the participant professions in attitude towards each other and to the programme. This, however, tells us nothing about attitudes towards interprofessional education in general held by those professions. In the absence of systematic evidence, it seems reasonable to assume that such attitudes differ as much within as between professions.

Suggestions that doctors and medical students are reluctant joiners are not born out by the facts. Two national surveys found that they were well represented relative to their overall numbers (Shakespeare et al, 1989; Barr and Waterton, 1996). A more searching analysis might find them engaged more often in work-based programmes, in settings where they are in positions of leadership; less often in university-based programmes, especially those in new universities where they have not studied previously. Some may also be discouraged from signing up for such programmes if they anticipate being a small minority and being expected to learn on equal terms with others during a time when their profession is especially under stress.

Nurses comprise the single largest groups of participants and may have most to gain at a time when their roles are being expanded. Social workers have also been well represented relative to their overall numbers, but it would be timely to check whether this is being sustained as a percentage as interprofessional education expands. The allied health professions (for reasons explained above) are most often involved in programmes with each other. So too are complementary therapists. Dentists and pharmacists are least likely to be involved (Shakespeare et al, 1989; Barr and Waterton, 1996), but keen to be if organisational constraints can be obviated (Owens et al, 1999).

Professional institutions

Royal Colleges and other professional institutions differ in their commitment to interprofessional education. Support from the Royal College of General Practitioners has been noteworthy (see page 10), as has that from Royal Colleges and professional associations for nursing, midwifery, service management and social work.

Support from such institutions has widened markedly following the formation of the 'Learning for Partnership Network'. This brings together representatives of Royal Colleges, other professional associations, validating bodies and training organisations at UK and national level to maintain open channels of communication on matters interprofessional and to engage in joint activities, part of CAIPE. Further information can be found on the CAIPE website (www.caipe.org.uk).

Validating bodies

Universities seeking approval for interprofessional programmes have been known to complain that they must satisfy different and sometimes incompatible requirements made by different validating bodies, while unresolved differences between officers get played out during the approval process. Whatever the substance behind these complaints, some validating bodies, notably for social work and nursing, took steps to draw up agreements (see, for example, GNCs/CCETSW, 1982&1983).

Universities

From the university perspective, combining professions in the same programmes may have had more to do in the early days with rationalising the use of resources, widening student choice and enlarging market share (Barr, 1994). But they became increasingly attuned to the need for collaborative practice in response to greater control of funding by

employers through Workforce Development Confederations and partnerships with many of them.

Employing agencies
While interprofessional collaboration is clearly important to employing agencies, they invariably put it in the wider context of collaboration between occupational groups and between organisation (Barr, 1994), to which interprofessional education has increasingly responded, and workforce planning as discussed at the beginning of this paper. Agencies, not universities, are the major providers of work based interprofessional education whether continuing professional development or practice learning for university programmes.

7. Surveys and Reviews

Three UK surveys
In the first of two surveys for CAIPE, Shakespeare et al. (1989) found 695 examples of interprofessional education in Great Britain. Only 2% were at undergraduate level, 18% during post qualifying training and 83% during continuing professional development. Most were brief. Over half lasted less than a day, over a quarter between two and four days, leaving very few that were longer. Topics covered included child abuse, teamwork, AIDS, mental health and learning disabilities.

The second survey by Barr and Waterton (1996) was designed, in part, to replicate the first, but this was frustrated by a lower response rate. It found 455 examples of interprofessional education in the UK. Three quarters of these were at the postqualifying stage. Most were two to five days long, but a third lasted less than two days. Topics covered were life stages from maternity to palliative care, chronic illnesses, collaboration, community care, counselling, disabilities, education and training, ethics, management and mental health. Most were instigated and run jointly by Health Authorities or Trusts in association with either colleges or universities or local authorities. Participants per initiative ranged from eight to fifty. Community nursing groups made up the largest category followed by medicine, professions allied to medicine and social work in that order. Learning was assessed in over half of the 200 initiatives lasting more than two days, almost always individually. Satisfactory completion often carried credit towards certificates, diplomas and degrees. Nine tenths of respondents reported that their initiatives had been evaluated, nearly half involving an independent assessor, but only a quarter had been written up and even fewer published.

These surveys solicited information from respondents thought likely to know of interprofessional education initiatives. Neither canvassed all relevant university departments and training agencies, which would have been impracticable with the resources available. Each painted an illuminating picture of interprofessional education, but was unable to estimate the overall incidence of interprofessional education, in view of the methodological constraints. Examples reported were mostly freestanding interprofessional education. Interprofessional learning woven into professional education or during everyday working could not easily be picked up.

The CVCP reported in 1995 that 54 of 77 higher education institutions with courses for health professions offered teaching and learning across professions, 30 at both undergraduate and postgraduate level, 13 at undergraduate level and 11 at postgraduate level. Twenty-four institutions had plans to expand shared teaching and learning, many in response directly or indirectly to the expectations of NHS purchasers. Twenty institutions were influenced by the need to prepare students for teamwork. This was supported frequently by statements that shared teaching and learning developed understanding of, and respect for, the work of other professional groups, broke down barriers and improved communication. Nine were planning modules in interprofessional skills including communications, which brought them within the scope of interprofessional education as defined in this paper. Twenty-five regarded shared teaching and learning as more cost effective, but others the reverse. Problems reported included time tabling; reconciling requirements of professional bodies, different abilities and academic levels; large classes and lecture theatres; and clinical placements. Joint validation had proved to be problematic, which made interprofessional education easier at the post-registration than pre-registration stage. But seven institutions made positive comments about the attitude of relevant professional bodies (CVCP, HPC/97/5).

Two local surveys

Shaw (1995) followed up shared learning reported in the first CAIPE survey in two English counties and compared it with the use made of such learning by 240 service units. Sustained commitment to such learning was impressive, but the difference between provision and perceived use was stark. Much of what was called shared learning by providers seemed not to be recognised as such by service agencies, even though two or more professions took part. Many were better described as common learning emphasising acquisition of information rather than interactive learning emphasising learning about each other.

Owens et al (1999) administered a postal survey to over two thousand practitioners from 24 health professions in Devon to ascertain the number of occasions during 1995/96 when they had taken part in continuing professional education or training events where two or more health professions were present together. Nearly three quarters (73%) reported that they had been involved in such education or training during the specified period, but the percentage from each profession varied widely. Health visitors most often reported participation in such education (94%), with other nursing groups also ranking high – school nurses (86%), district nurses (86%), practice nurses (85%), community psychiatric nurses (81%), midwives (79%) and hospital nurses (74%). Lowest participation rates were reported for dentists (25%) and pharmacists (22%).

Less than a quarter of all respondents thought that learning with members of their own profession alone was more worthwhile than learning with other professions, while three quarters thought that there should be more opportunities for such learning. No attempt was made to isolate occasions when learning together constituted interprofessional education as defined in this review.

Six UK reviews

Shaw's survey was one of three parts of a review of "shared learning" conducted by the University of Nottingham for CAIPE. Barr (1994) interviewed sixty opinion leaders. Against a background of competing agendas, he traced trends in education and service agencies and their impact on shared qualifying and post-qualifying studies. Priorities that emerged included the need to involve service users in planning, teaching, assessing and monitoring courses, to encourage reflective and interactive learning and to build in common and comparative learning. Barr and Shaw (1995) searched the literature for evaluations of shared learning. They found 19 between 1984 and 1994, summarising each with a commentary.

The Department of Health, the Welsh Office, the ENB and the NHS Executive each commissioned a review with a similar brief.

- The Department of Health commissioned the Scottish Council for Research in Education with the universities of Dundee and East Anglia to ascertain the extent of "multidisciplinary education" throughout the UK, perceptions of it and factors that facilitated or inhibited its development.
- The Welsh Office commissioned CAIPE in association with City University to identify the way forward for interprofessional education in Wales based upon a review of current interprofessional education activity and an analysis of factors that promoted or impeded effectiveness.
- The English National Board for Nursing, Midwifery and Health Visiting (ENB) commissioned Brighton University to map the extent of "shared learning", analyse factors influencing the roles of nurses, midwives and health visitors in teams, evaluate outcomes of learning in relation to effectiveness in teams and identify implications for pre- and post-registration education.
- The NHS Executive commissioned Tope to review interprofessional education programmes in the South West of England.

Pirrie and her colleagues undertook the study for the Department of Health (Pirrie et al. 1997, 1998a, 1998b). They employed qualitative methods to explore perceptions of "multidisciplinary education" in health care. Interviews were conducted with organisers and students from ten interprofessional courses and practitioners in two contrasting settings. Both teachers and students reportedly found it difficult to hold the tension between retaining unique areas of skill and knowledge, on the one hand, and sharing overlapping areas of knowledge and skill, on the other. Moving nursing into higher education had encouraged professional aspirations thought to run counter to the integration of learning with other professions. The breaking down of barriers was not universally welcomed.

Nevertheless, many of the course organisers interviewed saw a direct correlation between a satisfactory experience of learning with other professions and working together effectively as a team. Evidence from the study suggested that "multidisciplinary education" enhanced personal and professional confidence, promoted mutual understanding between professions, facilitated intra- and inter-professional communication, and encouraged reflective practice. Respondents thought, on balance,

that such education had more impact at the post-registration than the pre-registration stage. Logistical factors inhibited multidisciplinary courses, especially at the pre-registration stage. Initiatives were often ad hoc. An "overarching strategic vision" was critical to sustain developments in the long-term.

CAIPE and City University undertook the study for the Welsh Office in four stages: the identification of plans for interprofessional education; an analysis of the perceived effectiveness of interprofessional courses; issues affecting students and staff; and testing options for future development. Methods included a questionnaire to NHS Trusts, social services departments and CAIPE members to identify interprofessional courses. Seven case studies of interprofessional programmes were based upon analyses of records, interviews and focus groups. Courses included were anonymised by prior agreement. Findings focused upon ways to improve the delivery of interprofessional education with calls for longitudinal research to evaluate outcomes (Freeth et al, 1998; Tope, 1998).

Miller and her colleagues undertook the study for the ENB. Data were collected from case studies of clinical teams, surveys of higher education institutions with shared learning and interviews with Trust managers. Whereas the above studies focused upon interprofessional education, this one focused upon collaboration in practice and its implications for such education. The research found that "very little multiprofessional education in universities addresses interprofessional issues". Most was not designed for that purpose. Common curricula were established to reduce duplication, as opposed to utilizing and valuing professional differences, to inform collaborative working (Miller et al. 1999). Unlike Pirrie and her colleagues, Miller and her colleagues stressed the importance of interprofessional education during pre-registration courses to prepare students to work in teams.

Tope (1999 and 2001) reviewed seventeen interprofessional education courses in nine projects in South West England for the NHS Executive. Courses were university based, all but one being for qualified health and social care professionals. Duration ranged from less than a day up to three years part-time. Evaluation concentrated upon structure, content and recruitment rather than outcomes.

Research methods included analyses of curricula, development of course profiles, interviews with project leaders, course directors and student groups, and questionnaires administered to practitioners and their patients. Whilst most teachers and students thought that the courses had "achieved excellent results", there were problems in recruiting enough students to sustain viable courses. Most were nurses, midwives and health visitors. This limited scope for interprofessional learning.

The Standing Committee on Postgraduate Medical and Dental Education (SCOPME, 1999) convened a working party to conduct a three-stage review in an attempt to answer at least some of the most urgent questions about "multiprofessional education". During the first stage, the working party invited comments on the task in writing, orally and during two workshops. During the second stage, it distributed some 3,500 copies of a working paper with an accompanying questionnaire to which some 400 responded.

During the third stage, it researched three examples of multiprofessional learning and working.

The outcome was definition of multiprofessionalism as "a team or group of individuals from different disciplines with different and complementary skills, shared values, common aims and objectives", putting the emphasis upon the shared values. Learning multiprofessionally took place through working multiprofessionally. The two could not be separated. The working party had been told that effective multiprofessionalism would be inhibited by lack of specific instructions in, and assessment of, skills, but concluded that this was unfounded. Autonomy in a climate of equity and mutual respect would, according to the working party, enable practitioners to develop their own ways of effective working and learning together.

Five systematic searches of the literature

The Interprofessional Education Joint Evaluation Team (JET)[5] has completed one worldwide review and is well advanced with a second. Its self-appointed task is to establish, so far as practicable, the evidence base for interprofessional education from secondary sources.

The first review has attracted most attention so far, but produced least. It was conducted under the auspices of The Cochrane Collaboration and confined to evaluations of interprofessional education based upon Randomised Controlled Trials, Controlled Before and After Studies or Interrupted Time Series Studies and outcomes that directly affected the organisation and delivery of care for patients. None were found that met both criteria after an exhaustive search of Medline and CINAHL, but the team was at pains to make plain that absence of evidence that interprofessional education 'worked' must not be taken to mean that it does not work (Zwarenstein et al. 1999 and 2000).

Evaluations were, however, coming to JET's attention that, albeit falling short of the Cochrane criteria, shed light on the relationship between process and outcome in interprofessional education. JET decided therefore to conduct a second review taking into account a wider range of research methodologies – qualitative and quantitative – and a continuum of outcomes developed from work by Kirkpatrick (1967).

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[5] The group for the Cochrane Review comprised Dr Merrick Zwarenstein of the South African Medical Research Council, Jo Atkins and Dr Marilyn Hammick from Oxford Brookes University, Scott Reeves from City University, and Professor Hugh Barr and Dr Ivan Koppel from the University of Westminster. The Group for the two subsequent reviews included Dr Della Freeth of City University. Dr Zwarenstein and Jo Atkins stood down.

These were:

- Learners` reactions
- Modification of attitudes/perceptions
- Acquisition of knowledge/skills
- Changes in individual behaviour
- Changes in organisational behaviour
- Benefits to patients (Barr et al. 1999).

An exhaustive search of Medline from beginning to end (1968 to 1999) found 3,372 abstracts that seemed to be relevant, of which 282 articles were selected for systematic evaluation as a result of working in pairs with built-in quality checks. Of these, 163 were included in the sample. A similar re-run of CINAHL was then conducted and other databases searched.

Preferred methodologies were before and after studies or simple follow-up studies employing quantitative measures. Control groups were unusual and randomised controlled trials absent with two exceptions. Evaluations of the learning process employed qualitative methods, but they were relatively few and the methodology relatively underdeveloped. Presentation often left much to be desired making it hard to relate findings to learning experience. Too often JET had to reject evaluations for lack of adequate information, even though access to original data might have justified inclusion.

Preliminary findings provide empirical confirmation of the typology suggested by Barr (1996) (see page 32). The most telling highlights differences in outcome in relation to location. Positive outcomes reported from evaluations of interprofessional education based in higher education were overwhelmingly reactions to the learning experience, changes in attitude or perception and the acquisition of knowledge and/or skills. Positive outcomes reported from work-based interprofessional education also included changes in the organisation of practice and effects on patients or clients.

Programmes invariably employed interactive learning methods, but reports provided too little information to relate them to the classification suggested in this paper, still less to evaluate their relative effectiveness.

Nearly all of the evaluations included were from the United States (90%). Application of findings from US studies to the UK calls for caution unless and until sufficient similarity can be demonstrated between the form and purpose of interprofessional education. A third review conducted by JET is helpful here. Commissioned by the British Educational Research Association, it comprised a critical analysis of methodologies to evaluate 19 UK interprofessional education programmes with a summary of each (Barr et al, 2001). Questions addressed, methodologies employed and outcomes reported were similar to those in the United States.

Reeves (forthcoming) conducted a related review of data on the effects of interprofessional education on staff involved in the care of adults with mental health

problems. He searched Medline, CINAHL and Psychlit. Nineteen papers qualified for inclusion, but quality was generally poor.

Cooper and her colleagues (Cooper et al 2001) conducted a similar search of interprofessional education at undergraduate level. They found 141 relevant research studies, 30 of which were included in their analysis. The researchers concluded that outcomes from "interdisciplinary education" primarily related to changes in knowledge, skills, attitudes and beliefs. Effects upon professional practice were not discernable. This confirms findings by JET.

The emerging evidence suggests that interprofessional education can, in favourable circumstances and in different ways, contribute to improving collaboration in practice. Caution must, however be exercised given the small number of evaluations so far included and bias in the selection of articles for publication by journals and criteria for the inclusion of journals in databases.

8. Unity and Diversity

Readers will be painfully aware by now that they have stumbled into a semantic quagmire (Leathard, 1994) where terms are used interchangeably or with seemingly precise but strictly private meanings. Academics marry prefixes (inter-, multi-, cross-, trans-) with adjectives (professional and disciplinary) and nouns (education, training, learning and studies) in seemingly endless permutations. Policy makers and practitioners prefer more prosaic (and less elitist?) terms such as "joint training", "shared learning" or "common studies".

Activists in the UK have generally adopted "interprofessional education" to describe learning designed to improve collaborative practice. Multiprofessional education is, however, preferred by those universities which take their lead from the World Health Organization (WHO, 1988) and link with the Continental European tradition where that term has general currency (see definitions on page 6).

Steps or characteristics
Harden (1999) suggested eleven steps from isolated to integrated learning between professions, perhaps better treated as characteristics to be combined and introduced in different orders rather than along a continuum.

They may be summarised as follows:
1. Each profession organises its own teaching unaware of what is taught by other professions
2. Teachers are aware of what is covered by professions, but with no formal contact
3. Consultation about teaching programmes between teachers from different professions
4. Teaching relating to the work of other professions is included
5. Time tabling is arranged to permit to schedule the same learning experiences
6. Joint teaching in part of otherwise separate programmes
7. Sessions scheduled for multiprofessional consideration of topics

8. Multiprofessional and uni-professional teaching runs side by side
9. The programme emphasises multiprofessional learning, each professional looking at themes from its perspective
10. Each profession looks at the subject from its own perspective and that of the other professions
11. Multiprofessional education is based upon experience of the real world

Dimensions of interprofessional learning
Barr (1996) argues that interprofessional education has many dimensions:

> *Implicit or explicit*
> Interprofessional learning probably occurs unrecognised during everyday work when practitioners from different professions communicate in one-to-one exchange, during committees, team meetings and case conferences, and so on. It may also occur during multiprofessional education even though the learning is not designed to further collaboration. Such implicit learning may be consolidated and verified when it is made explicit, although that may be the exception. Explicit interprofessional learning more often occurs during courses, workshops and conferences designed to promote collaboration.
>
> *Discrete or integrated*
> While interprofessional education may be freestanding, i.e. designed exclusively to improve the quality of care through better collaboration, it may also be integrated into multiprofessional or uni-professional education as a dimension or emphasis. The issue then becomes compatibility of aims with reference to the design of programmes, including content and learning methods.
>
> *All or part*
> Interprofessional education may comprise all or part of a programme. It can never be more than part of an undergraduate programme (allowing for profession specific requirements), but may characterise the whole of a post-qualifying or continuing professional development programme.
>
> *General or particular*
> Focusing upon collaboration for particular user group, practice method or work setting, or more broad-based.
>
> *Positive or negative*
> Learning between professions may positive, improving relationships and laying foundations for effective collaboration in practice, as interprofessional education sets out to do, or negative, reinforcing prejudices, stereotypes and misunderstandings, which sometimes happens despite best laid plans.
>
> *Individual or collective*
> Interprofessional education may focus upon individual learning and assessment or collective learning where participants undertake joint assignments, for example,

analysing problems, improving services and effecting organisational change. Where such learning is assessed, individual contributions may need to be distinguished from corporate contributions.

Work-based or college-based
Interprofessional learning may occur in the workplace, informally or during in-house training, in college or a combination of the two. College-based interprofessional education typically includes practice placements or work-based assignments as the test bed for collaboration.

Shorter or longer
Interprofessional education may be brief – during a working communication, an agenda item for a team meeting or a lunchtime gathering – or extended during a course lasting weeks, months or years.

Sooner or later
Interprofessional education may be introduced at any stage in undergraduate education or subsequently at any stage throughout lifelong learning.

Common or comparative
Curricula may be built around learning needs deemed to be common across the professions included, or comparative learning to facilitate understanding about respective roles and responsibilities, powers and duties, and perspectives and perceptions to inform collaboration in practice.

Interactive or didactic
Teachers typically introduce interactive learning methods in small groups to enable the different professions to explain themselves to each other and to exchange experience, using didactic methods sparingly.

A provisional typology
Barr (1996) took these dimensions into account in formulating a provisional typology of interprofessional education. This related objectives, content and learning methods to the stage which participants have reached in their professional education, the length and location of the learning, the number of professions included and the field of practice.

He floated the following propositions.

The earlier the interprofessional learning in participants` experience, the less they are in a position to share and the more the teacher needs to provide. The later the learning, the more the participants would be able to set their own agenda and call upon their own resources.

Objectives for interprofessional education before qualification might be preventive - mitigating the risk of developing prejudices and negative stereotypes, and preparatory, laying foundations for subsequent interprofessional learning and practice. Objectives for

interprofessional learning after qualification might be more ambitious – effecting change and improving services.

The shorter the initiatives, the more selective the content would need to be and the more intensive the learning methods. The longer the initiative, the more diverse could be the content and the less intensive could be the interactive learning methods.

Work-based interprofessional education would be more task-specific, with more immediate impact on practice and more direct benefit to patients than university-based learning, which might be more wide-ranging and more reflective, impact on practice being more diffuse and longer-term.

The smaller the number of professions involved, the greater would be the opportunity to focus upon their roles and relationships; the larger the number, the greater the opportunity to develop a rounded view of a field of practice from multiple perspectives.

Parsell et al. (1998) (citing Loxley, 1980 and Funnell et al, 1993) suggest that factors favouring effective interprofessional education are:

- balanced membership between professions
- an attractive programme for the participants
- pre-event information
- clear learning outcomes
- interactive learning methods
- a physically and psychologically comfortable learning environment

All but the first of these should be hallmarks of any educational programme, but the need for balanced membership, interactive methods and comfortable surroundings merit reinforcement in interprofessional learning.

Principles of interprofessional education (CAIPE, 1996; Barr, 1997) call for revision in the light of the above discussion along the following lines.

Interprofessional education:

1. ***Puts service users at the centre***
   Involve patients and clients in designing, teaching, participating and assessing programmes.
2. ***Promotes collaboration***
   Apply learning to collaborative practice, collaboration within and between professions, within and between organisations and with communities, service users and their carers.
3. ***Reconciles competing objectives***
   Harmonise, so far as practicable, the aims and methods of interprofessional education with those for multiprofessional and uni-professional education.
4. ***Reinforces collaborative competence***

Reach beyond modification of attitudes and securing common knowledge bases to ensure competence for collaborative practice (see pages 15 to 18).

5. ***Relates collaboration in learning and practice within a coherent rationale***
   Give reasons why interprofessional learning improves interprofessional practice grounded in theory.
6. ***Incorporates interprofessional values***
   Be inclusive, equitable, egalitarian, open, humble, mutual, generous and reciprocal.
7. ***Complement common with comparative learning***
   Include comparative studies to facilitate learning from and about each other, to enhance understanding about respective roles and responsibilities and inform co-working.
8. ***Employs a repertoire of interactive learning methods***
   Avoid over-reliance on any one method.
9. ***Counts towards qualifications***
   Assess interprofessional education for awards to add value.
10. ***Evaluates programmes***
    Subject interprofessional education to systematic approval, validation and research.
11. ***Disseminates findings***
    Inform other developments in interprofessional education.

9. Directions and Development

The following priorities emerge from this review.

Securing the evidence base
The existing evidence base will soon be in place as JET completes its second systematic review of worldwide sources, exposes findings to critical appraisal by fellow researchers, enlists their help in filling gaps and formulates methodology for future evaluations.

Setting and regulating standards
CAIPE is preparing a statement of standards in terms designed to be helpful to confederations, universities and the QAA variously engaged in funding, approving, validating, monitoring and reviewing interprofessional education. Benchmarking is being taken into account in formulating outcome criteria and good practices in formulating process criteria. CAIPE is also accrediting experienced interprofessional teachers and trainers to advise on the development of programmes and to serve on committees, panels and reviews.

Evaluating selected programmes
Most programmes are already subject to quality control, assurance and improvement as interprofessional education enters the mainstream. Only some can be subject to more rigorous evaluation, given resource implications. Priority might well be given to those responding to new needs, employing new learning methods, introducing new professions

or in new settings. JET is preparing guidelines for prospective evaluation, based upon a critique of methodologies employed in previous programmes included in its reviews.

A further tranche of funds promised by the Department of Health is welcome, not simply to evaluate selected programmes one-off, but to embark upon a coordinated strategy using the best available expertise to support evaluation teams for those programmes, to ensure cross-fertilisation of learning along the way and collate findings.

Comparing experience of interprofessional education in different fields
Despite opportunities created by organisations like CAIPE, there are few occasions when teachers engaged in different fields of interprofessional education meet to compare experience. Yet different traditions, for example, in child protection, primary care and learning difficulties, might gain much from such encounters.

Preparing the next generation of teachers
The number of teachers engaged in interprofessional education is increasing rapidly. More therefore needs to be done, not simply to hand on past experience, but to demonstrate how principles of adult learning can be developed and applied to interprofessional learning informed by the evidence and alive to changes in practice.

Preparation for experienced teachers might well be modeled upon workshops run by CAIPE. These introduce teachers and trainers to the rationale for interprofessional education to design, deliver and evaluate programmes. Participants, singly or with colleagues, then work on their proposals in their university or service agency, reporting progress at a recall day and planning further developmental work with the support of tutors and fellow participants. A learning pack is used before, during, between and after the workshops for individual and group study.

Similar learning might well be woven into the postgraduate certificate programmes for newly appointed teachers in health, social care and related fields to provide an interprofessional dimension.

National Service Frameworks
Interprofessional education needs to be informed by evidence about best collaborative practice enshrined in National Service Frameworks (NSFs) and complemented by findings from clinical governance. Account is already being taken of NSF reports on the care of old people (Department of Health, 2001) and the mental health (1999) and similar documents (e.g. Sainsbury, 1997). A comparative critique is needed of NSF reports, as they come on stream to determine their cumulative implications for professional and interprofessional education.

Undergraduate interprofessional education
Models need to be devised and tested for the introduction of interprofessional dimensions, emphases or strands into professional programmes. A major constraint may be the development of placements exemplifying good collaborative practice. Another is the feasibility of including interactive learning in small groups for large numbers of

students within budgetary constraints. Without this, interprofessional education may fail to contribute to better collaboration. Peer group learning is being suggested to make small groups practicable, while containing costs and claims on staff time, but may need to be preceded by teacher-led group learning. The relative effectiveness of teacher-led and student-led learning calls for comparative evaluation, taking into account different methods and different ways in which staff can stimulate, steer and support learning directly and indirectly.

Continuing interprofessional development in the workplace
While undergraduate interprofessional learning lies primarily within the domain of universities, many employers see continuing interprofessional development as their province. The evidence suggests interprofessional learning in the workplace does more to effect change and improve services, while some university-based postgraduate programmes fail to recruit viable numbers (Tope, 1999 and 2001).

There is a danger that the split between university-based and work-based interprofessional learning will widen. Universities may retain responsibility for programmes catering for workers wanting to study outside their workplace, if necessary in their own time at their own expense with an eye to career progression, employers taking responsibility for continuing professional development.

Some universities may be content to concentrate upon making their distinctive contribution although their market share may shrink. Others are keen for their teachers to help design, deliver and evaluate work-based learning in partnership with employers supported by Workforce Development Confederations. If so, credibility depends upon teachers demonstrating their understanding of reforms in service delivery, implications for workforce and training strategies and the development of group and organisational learning as much as individual learning.

A continuum of learning
Formulation of a continuum of learning is overdue, interweaving professional, multiprofessional and interprofessional elements throughout lifelong learning in universities, the workplace and both. Only then can each element be designed to complement and reinforce the others and partnerships between employers and universities operate within a coherent framework.

The workforce and training agenda
Competing expectations of shared learning may be reconciled within that framework, including those in the workforce and training strategy (pages 6 to 8).

Meanwhile, the following observations may help. Collaboration involves give and take between colleagues from different professions as circumstance demands. Substitution goes further. It prescribes circumstances where one profession may undertake responsibilities normally reserved for another. Subject to agreement with the profession affected, substitution should encourage informal give and take in collaborative practice

within predetermined limits. Without such agreement, collaboration may be jeopardised and interprofessional education made more difficult.

Agreements regarding substitution presuppose that members of the profession undertaking the additional responsibilities have received education assessed to a comparable level to that for the profession relinquishing those responsibilities. The same applies where qualification studies for one profession count towards qualification for another. It need not apply to learning intended to improve collaboration where appreciation of different levels of skill and knowledge attained by different professions may inform co-working.

Common studies designed to further substitution and accelerated career progression may also need to be more extensive than those designed to further collaboration, with the attendant risk that comparative studies deemed essential to learning for collaboration will be squeezed.

These complications do not arise when programmes are mounted exclusively to improve collaboration, but that is now the exception. It falls to teachers more often to reconcile different objectives in relation to structure, content, methods, standards and assessment.

Conclusion

Experience and evidence, like warp and weft, are woven into the unfinished fabric of interprofessional education. Broken threads, loose ends and frayed edges there are many, for which I take responsibility insofar as they may have been found in this paper, yet mindful of the current state of the art. For much remains to be done by the rising generation of teachers as they contribute from their experience, reading and research in the same spirit of mutual exchange and support that has come to characterise the interprofessional education movement and speaks volumes for the values that it espouses.

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Appendix

Benchmarking Statements

Statements for health care referring to collaboration between professions in health care say that each award holder should:

- Participate effectively in inter-professional and multi-agency approaches to health and social care where appropriate
- Recognise professional scope of practice and make referrals where appropriate
- Work, where appropriate, with other health and social care professionals and support staff and patients/clients/carers to maximise health outcomes
- Draw upon appropriate knowledge and skills in order to make professional judgements, recognising the limits of his/her practice
- Communicate effectively with patients/clients/carers and other relevant parties when providing care
- Assist other health care professionals --- in maximising health outcomes
- Contribute to the well-being and safety of all people in the workplace
- Show an understanding of his/her role within health and social care service
- Communicate effectively with the client/patient, (and his/her relatives/carers), group/community/population, about their health and social care needs
- Recognise the place and contribution of his/her assessment within the total health care profile/package, through effective communication with other members of the health and social care team
- Work with the client/patient, (and his/her relatives/carers), group/community/population, to consider the range of activities that are appropriate/feasible/acceptable, including the possibility of referral to other members of the health and social care team and agencies
- Plan care within the context of holistic health management and the contribution of others
- Educate others to enable them to influence the health behaviour of individuals and groups
- Motivate individuals and groups in order to improve awareness, learning and behaviour that contribute to healthy living
- Have effective skills in communicating information, advice, instruction and professional opinion to colleagues, patients, clients, their relatives and carers; and, where necessary, to groups of colleagues or clients

(QAA, 2001)

Comparable statements for social work say that graduates should:

- Recognise and work with powerful links between intra-personal and inter-personal factors and the wider social, legal, economic, political and cultural context of people's lives
- Work in a transparent and responsible way, balancing autonomy with complex, multiple and sometimes contradictory accountability
- Exercise authority within complex frameworks of accountability and ethical boundaries
- Negotiate goals and plans with others
- Implement plans through a variety of systematic processes
- Make effective contact with individuals and organisations for a range of objective
- Clarify and negotiate the purpose of such contacts and the boundaries
- Act co-operatively with others, liaising and negotiating across differences such as organisational and professional boundaries and differences of identity or language
- Develop effective helping relationships and partnerships with other individuals, groups and organisations that facilitate change
- Act with others to increase social justice
- Act within a framework of multiple accountability
- Challenge others when necessary, in ways that are most likely to produce positive outcomes

Understand:

- the relationship between agency policies, legal requirements and professional boundaries in shaping the nature of services provided in inter-disciplinary contexts and the issues associated with working across professional boundaries and with different disciplinary groups
- the current range and appropriateness of statutory, voluntary and private agencies providing community-based, day-care, residential and other services and the organisational systems inherent within these
- the significance of interrelationships with other social services, especially, education, housing, health, income maintenance and criminal justice
- factors and processes that facilitate effective inter-disciplinary, inter-professional and inter-agency collaboration and partnership

(QAA, 2000)

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Paper A9

Mainstreaming Interprofessional Education in the United Kingdom

A Position Paper

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Mainstreaming Interprofessional Education in the United Kingdom

A Position Paper

Hugh Barr & Fiona Ross

Joint Editors-in-Chief, Journal of Interprofessional Care

Summary
Interprofessional education (IPE) is being built into the mainstream of professional education for all health and social care professions throughout the United Kingdom (UK) driven by the Labour Government elected in 1997, coincidentally the year that this Journal hosted the first All Together Better Health conference in London. The incoming government prioritized pre-qualifying IPE to be provided in partnership by universities and service agencies supported regionally by workforce development confederations, later absorbed into strategic health authorities (SHAs), and centrally by educational, professional and regulatory bodies. Ambitious agenda for pre-qualifying IPE set by government are being tempered by realistic assessment of current outcomes borne of experience and corroborated by evidence. This paper suggests some ways to ease constraints and improve outcomes, but emphasizes the need to generate continuing interprofessional learning opportunities that build on the basics. It argues that accumulating experience and evidence must be brought to bear in formulating criteria for the approval and review of IPE within regulatory systems for professional education. Can IPE be sustained within mainstream professional education once initial enthusiasm ebbs and earmarked funds run dry? That is the issue.

Keywords: Mainstreaming, regulation, sustainability, interprofessional education

Facilitating critical comparison between countries

Our focus is the distinctive qualities of IPE in the UK in their political context, our purpose to inform critical comparison with developments in other countries. Please add your perspectives from home and abroad via the Editors' ''postbag''. We shall be happy to collate responses with a view to publishing a collation in a future issue. The UK is learning more and more from other countries as the ''interprofessional movement'' gathers momentum worldwide, as this paper amply illustrates, but stands ready to share

its accumulating experience. We, with fellow editorial team and board members of this journal, have been privileged to promote and develop it as a vehicle for international exchange on matters interprofessional as its readership and coverage has spread ever wider during the years under review. We look forward to developing that role further in partnership with the International Association for Interprofessional Education and Collaborative Practice (InterEd).

Reconciling competing agenda

''Mainstreaming'' is a convenient catchword (or catch all) to capture diverse meanings and motives driving the promotion of IPE, rehearsed many times in the literature (see, for example, WHO,1988; Department of Health, 1998; Barr,2002, 2003).It refers most obviously in the UK to steps being taken to integrate IPE – in organizational, financial, regulatory and theoretical terms – into professional education with which its relationship had previously been tenuous and marginal. Integration, so the argument runs, will secure its future, enhance its credibility and make IPE more effective as a means to improve collaborative practice and thereby the quality of care. Viewed thus, mainstreaming is the means to bring IPE as developed and understood during the three preceding decades in from the cold.

That agenda has, however, been overlaid by a more radical one to modernize the health and social care workforce by ''educational engineering'' with IPE as the chief agent. Practising professionals, say the policy makers, need to be educated to be more responsive to consumer expectation and to changes in the organization and delivery of services. IPE should not only contribute to the modernization of service, but also to the modernization of professional education systems by the backdoor. The veiled threat to the integrity of the professions and to their educational systems did not pass unnoticed and accounted, in our experience, for much of the early resistance towards ''mainstreaming''.

Progress depended upon unraveling the confusion surrounding the purpose and meaning of IPE whilst acknowledging and reconciling competing agenda. It has been largely at local level between stakeholders promoting and developing pre-qualifying IPE, gravitating upwards as educational, professional and regulatory bodies centrally have taken stock of developments on the ground and reviewed their national policies and requirements.

Responding to Government's lead

Early IPE initiatives in the UK were invariably isolated, small-scale and short-lived in response to local needs and opportunities (Ross & Southgate, 2000; Barr, 2002), although some enjoyed support and encouragement nationally from regulatory and professional institutions. Since 1997, however, central government has taken the lead (Secretary of State for Health, 1997; Department of Health, 1998; Pitillo & Ross, 1998; Barr, 2000). The Department of Health expects, and may soon require, that pre-qualifying courses for all entrants to health and social care include interprofessional learning (Department of Health, 2000a). The drive for more and more effective IPE comes therefore from above and below. Neither national edict nor local initiative alone could have generated the commitment to IPE now manifest throughout the UK.

Entering the mainstream

SHAs are promoting IPE as part of their responsibility for professional education, advised in England by ''Creating an Interprofessional Workforce'', a three-year project initiated by the Department of Health ''to mainstream interprofessional learning and development in health and social care''.[1] Most regulatory, educational and professional institutions, including those professional associations enjoying the prestigious status of ''royal college'', have enshrined IPE in their policies, guidelines and requirements. The contribution of the Higher Education Academy is noteworthy, through three of its subject centres,[2] which convene interprofessional conferences and workshops and publish interprofessional papers. The UK Centre for the Advancement of Interprofessional Education (CAIPE) continues to support and represent its members, run workshops, contribute to conferences and publish on matters interprofessional through its website[3] and books in association with Blackwell (Meads et al., 2005; Barr et al., 2005; Freeth et al., 2005a).IPE is being woven into the fabric of uniprofessional education at the pre-qualifying stage and multiprofessional education at the post-qualifying stage.

Promoting pre-qualifying IPE

Conventional wisdom that IPE is better left until after qualification has been swept aside as the case for collaborative practice has become evermore compelling. Pre-qualifying IPE partnerships have been established throughout much of the UK, including four pilot sites in England funded by the Department of Health.[4] Many comprise two or more universities (often in different towns) between them providing pre-qualifying programmes for most if not all of the regulated health and social professions, in partnership with NHS Trusts, local authorities and agencies from the independent sector. The number of students registered for IPE is growing rapidly (the largest number at one site being 7,000), although time spent in IPE is typically a small part of their pre-qualifying professional studies. Ways in which IPE is being introduced differ. Some sites ''implant'' it as one or more module or sequence into university-based curricula, the test being whether it ''takes'' in the host body. Others include it in practice placements, yet others as e-learning in parallel with professional studies. The New Generation Project in

Southampton and Portsmouth is more ambitious. It has remodeled much of the uniprofessional into multiprofessional learning in the form of common curricula across professions, but mostly taught separately for logistical reasons. Relatively short periods of time are protected for intensive, interactive, face-to-face, small group, interprofessional learning (O'Halloran et al., 2006).

The Department of Health for sometime preferred the term ''common learning'' to ''interprofessional education'' with the inference that health and social care students, regardless of their professions, should follow common curricula. Persuasive though the case made for common studies was (Department of Health, 2000b), it detracted from the differential application of knowledge and from comparative curricula about respective roles and responsibilities. The trend towards the reinstatement of the term ''interprofessional education'' is providing much needed reassurance that cultivating relations between professions lies at the heart of learning together, whatever else it may seek to achieve.

Data from the pre-qualifying IPE sites have yet to be collated and analysed, but evaluations are beginning to be published from some sites (Parsell et al.,1998; Tunstall-Pedoe et al., 2003; Cooper et al., 2005), which provide early clues about the relative effects of different models and learning methods. None of the four designated pilot sites has so far reported, but a composite monograph is in preparation while the overall evaluation of those sites by Carolyn Miller and her team for the Department of Health is keenly awaited.

Evaluations so far of pre-qualifying IPE tend to be more revealing about process and outcomes for interprofessional interventions than to the overall programmes of which they are part. At issue is whether outcomes from short periods of IPE, however positively reported on immediate completion, have lasting benefit by the end of the professional programmes and subsequently in practice. If so, well-planned implants may suffice. If not, renewed efforts will be needed to develop longitudinal and incremental IPE sequences that permeate professional programmes with an interprofessional ethos. Learning from those sites that have made progress along these lines is critical.

Setting realistic objectives

Expectations of IPE have multiplied (see above), but interprofessional educators are cautious. They are alive to the potential pitfalls in expecting more of IPE than it can realistically deliver at the pre-qualifying stage or their students can master so early in their careers. They understand well their duty to prepare students for their primary roles in each profession, mounting pressure on uniprofessional curricula and constraints of profession-specific regulations. Encouraged though they are by national and international evidence that pre-qualifying IPE can, under favourable conditions, modify attitudes and perceptions, and provide knowledge and skills, to pave the way for collaborative practice (Barr et al., 2000, 2005), they are reluctant to make claims that go further. Their experience teaches them that lasting benefit depends upon opportunities to consolidate learning after qualification in a working environment that supports collaborative practice,

with continuing opportunities for interprofessional learning in the workplace and in university.

But they are not complacent. Work is in hand to introduce interprofessional learning methods that may prove to be more effective and more efficient, including e-based learning (Hughes,2004) and innovative practice learning models (Lennox & Anderson, in preparation) that may extend outcomes. Developing competency or capability-based models may move beyond modifying attitudes to changing individual behaviour; improving preparation for teamwork may move beyond changing individual behaviour towards changing organizational behaviour (Barr et al., 2005).

Building on the basics

Outcomes will nevertheless always be constrained at the pre-qualifying stage, which points to the need to build on the basics. Interprofessional learning is being introduced into multiprofessional conferences, workshops and short courses. But the number of students released for longer university-based postqualifying IPE remains small in marked contrast to the 'battalions'' soon to emerge who have benefited from at least some interprofessional learning during their pre-qualifying courses.

IPE is nevertheless being built into post-qualifying multiprofessional education including systems that offer a choice of modules to be built into sequences of study leading to a range of awards. At best, they take into account the preferences of students and their employers, while building in flexibility in response to the vicissitudes of fashion in the educational market place and maintaining viability as numbers wax or wane for any one course or module. Viability depends on devising user-friendly patterns of study in consultation with service agencies and those staff whom they are contemplating releasing, at the same time making provision for relatively small numbers of full-time students often enrolling at their own expense. Experience suggests that university-led post-qualifying systems stand a better chance when they meet service agencies' preference halfway for less costly in-house continuing education. This obviates the need to take staff away from their regular duties and responds to priorities for organizational development and improvements in service delivery.

Some universities are exercising imagination and ingenuity to retain their stake in post-qualifying uniprofessional, multiprofessional and interprofessional education, but the main thrust in continuing learning is now work-based. Attention is turning to ways in which interprofessional learning occurs (or fails to occur) during everyday work. Continuous quality improvement projects are proving to be especially productive in generating learning opportunities where colleagues from different professions own the same problems and work together to effect improvement (Annandale et al., 2000; Wilcock et al., 2003).

Lead responsibility for uniprofessional and interprofessional education in the UK is polarizing between universities at the pre-qualifying stage (as they assume the lead albeit in partnerships with employing agencies) and service agencies at the post-qualifying stage. This makes it harder to formulate a coherent and unifying rationale for career-long continuing professional education that interweaves uniprofessional, multiprofessional and interprofessional strands in university and workplace. The key may lie in understanding and exploiting work-based learning better so that uniprofessional, multiprofessional and interprofessional education can be developed in service agencies and universities, separately and together. Expectations of pre-qualifying interprofessional education may then be cast in a fresh light.

Reinforcing regulation

IPE is necessarily becoming subject to regulation as it enters the mainstream of professional education and makes greater claims on the public purse. Many UK universities now take it into account during internal approval or review of their professional programmes and ensure that it features in documentation presented for external validation or review. Requirements for IPE in the UK have been written into regulations for professional education by professional institutions and regulatory bodies, service agencies and central government.

Groundbreaking work has all but been completed by the Quality Assurance Agency for Higher Education in England (QAA).[7] It invited representatives for nursing and for each of the allied health professions to prepare benchmarking statements as standards for pre-qualifying professional education for health care programmes (QAA, 2001) complementing earlier work for social care (QAA, 2000). It invited the same representatives from health care to work together to draw up common benchmarking statements applicable to all the health professions. More recently, the QAA has formulated (but at the time of writing not yet published) benchmarking statements for collaborative practice between these professions.

The QAA statements are as remarkable for the process by which they have been prepared as for the consensus generated between professions within a framework of mutual respect. Albeit long and detailed, the statements have already been widely adopted to inform the design of uniprofessional, multiprofessional and interprofessional education, and its approval and review by universities and by the QAA itself.

They have also been taken as first base for ongoing reforms in the validation and review of health professions' educational programmes.[8] These are being led by Skills for Health on behalf of the Department of Health in consultation with the Health Professions Council (HPC) (responsible for the allied health professions), the Nursing and Midwifery Council (NMC) and others. The ''Partnerships Quality Assurance Framework for Health Care Education in England'' (PQAF) will take into account benchmarking and quality standards and the ''shared evidence base'' (DepartmentofHealth,2003).

It remains to be seen how the role of the QAA may be redefined with regard to the regulation of the health and social care professions. It remains to be seen too how the anticipated reduction in the number of regulatory bodies will affect the HPC and the NMC and possibly the General Medical Council, the General Dental Council and the Royal Pharmaceutical Society under the umbrella of the Council for Healthcare Regulatory Excellence (CHRE). The General Social Care Council (GSCC) has not so far been brought under that umbrella and may remain outside health-centred reforms. Arguments for inclusion gain ground as health and social care services for adults and older people are integrated, but the integration of education and social care services for children brings together a different configuration of professions with different implications for regulation.

Interprofessional educators may be watchful that future regulatory systems and criteria do not inhibit IPE from making expeditious, innovative and imaginative responses to unforeseen and unforeseeable developments in policy and practice. They will be following closely how the PQAF reconciles benchmarking statements and occupational standards[9] in the context of National Service Frameworks (NSFs).[10] They may be anxious to see how guidelines for IPE expected in 2007 from the Department of Health will relate to the PQAF and whether they will take into account principles and guidelines commended by CAIPE (CAIPE, 2001; Barr, 2003) and advice to IPE programmes on development, delivery and evaluation (Freeth et al., 2005a&b).

Consultation between policy makers and interprofessional educators about the future development and regulation of IPE will be more focused and more intelligent if it is informed by an agreed evidence base that includes findings from systematic reviews to which we now turn attention.

Assembling the evidence base

Sustained efforts have been made during the past eight years by a UK team to assemble the evidence base for IPE from national and international sources. Its first review was under the auspices of the Cochrane Collaboration and subject to criteria agreed with it. These were that an eligible evaluation comprised a randomized controlled trial, controlled before and after study or an interrupted time series study and that outcomes reported referred to patient experience and/or the improvement of services. Exhaustive searches of Medline and CINAHL found no evaluations that met both these criteria (Zwarensteinetal., 2001) feeding ammunition to skeptics at home and abroad all too eager to seize on evidence that IPE does not ''work''.

Members of the Team had, however, become aware of many evaluations of IPE that, albeit not meeting the tight criteria agreed with Cochrane, were relevant to their quest. They therefore reconstituted themselves as the Interprofessional EducationJoint Evaluation Team (JET) to conduct further reviews within equally rigorous but less constrained criteria. Its second review was a qualitative critique of 19 UK evaluations (Barr et al.,2000). Its third, based upon realistic theory, revisited the same databases as the first, plus others, and found 353 evaluations that met its revised criteria (Barr et al.,

2005). Of these, 107 were judged to be sufficiently robust to include in the analysis. Its fourth review for BEME (Best Evidence Medical Education) is in preparation, updating and augmenting data from third, and setting a higher threshold of study quality for inclusion.

Findings from the second and third of these reviews render redundant debates about whether IPE ''works'', pointing instead to the need to focus on the efficacy of different types of interprofessional education and their outcomes. It remains to be seen whether protestation that there is no evidence of the benefits of IPE will be laid to rest in the light of these reviews. Four issues are at stake. The first is whether the efficacy of IPE should be judged against the RCT ''gold standard'' for evaluating clinical interventions or against well-tried evaluative methods more often employed in education. The second is the value to be accorded to intermediate outcomes that equate with objectives typically set for pre-qualifying IPE, e.g., establishing knowledge base for collaborative practice and modifying negative stereotypes, thought to pave the way for collaborative practice, service improvement and benefit to patients and clients. The third is the credence to be accorded to the findings to inform UK policy when two-thirds of the evaluations reported were from other countries, notably from the United States with its markedly different health care system (Barr et al., 2005). The fourth is the weight to be accorded to evidence from research, including that reported in systematic reviews, relative to evidence born of experience and from programme review.

We question the relevance of hierarchies of evidence in this context, preferring to treat the relationship between these three sources of evidence as iterative, each corroborating, modifying or challenging the other. We anticipate that IPE policy and practice will be re-appraised in the UK weighing findings from QAA reviews, the evaluation of programmes commissioned by the Department of Health, other comparable UK evaluations, comparable evaluation in other countries and, hopefully, the experience of the individuals and organizations directly involved.

IPE, like the professional education of which it is part, merits more research than it has so far received, but the number of studies reporting from the UK and other countries is rising steadily and their quality is improving. Policy makers and programme planners alike can therefore expect to have more and better evidence at their disposal, but judgement will still need to be exercised, informed by a variety of sources of evidence.

Introducing theory

Theoretical p perspectives (see, for example, Colyer et al., 2005; Barr et al., 2005; Hean & Dickinson, 2005) are helping to establish the credibility of IPE in academe and to explain it in terms with which teachers, especially from contributory disciplines, can engage. Those perspectives draw on a spectrum of the educational, organizational, behavioural and social science disciplines, calling on sources from Russia to the United States. Some illuminate the interprofessional practice for which programmes are preparing their students, others the means by which they learn together, yet others processes of service improvement within which work-based interprofessional learning

can be cultivated. A digest of these developments would be premature until the first round of publications has been subjected to critical review, further contributions prompted and connections made taking into account papers in the pipeline from other countries.

Sustaining IPE

IPE, once it is embedded in the mainstream, will be relatively secure and sustainable. So says conventional wisdom. We have warned against the danger when implants fail, although we doubt whether this worst case scenario occurs often in IPE.

The dangers are more insidious, for example, when:

- competing claims on teachers, including pressure to conduct research and publish, constrain time and opportunity to reflect and innovate in teaching and learning,
- their interprofessional commitment wanes,
- high turnover of teachers is compounded by lack of preparation in IPE for new appointments, cuts in resources undermine small group teaching on which effective IPE depends,
- managers and regulators fail to understand and protect its distinctive features
- top level support is withdrawn following changes in senior management, and
- IPE is marginalized, boxed in, or isolated from uniprofessional learning.

Securing mainstream educational funding, locally, regionally and nationally, is critical to sustain both the quality and quantity of IPE and to carry forward its development. Successful bids for support from the Higher Education Funding Council for England to establish Centres for Excellence in Teaching and Learning (CETLs) not only provide much needed resources for IPE development but also tangible evidence that IPE is gaining acceptance. The terms of reference for many of the CETLs bear on IPE directly or indirectly.[11]

If ''mainstreaming'' is to be more than mere rhetoric lPE must pervade the culture of professional education, supported unequivocally by top management, backed by the spectrum of stakeholders, benefiting from core educational funding, owned equally by each of the constituent professional programmes, permeating uniprofessional and multiprofessional teaching and learning throughout. Easily said, less easily done!

Notes

1. www.cipw.org.uk.
2. Medicine, Dentistry and Veterinary Science, Health Sciences and Practice, and Social Policy and Social Work.
3. www.caipe.org.uk.
4.King's College London with Greenwich and London South Bank universities, Newcastle and Northumbria Universities, Sheffield and Sheffield Hallam universities, and Southampton and Portsmouth universities, all in partnership with Health Trusts, Local Authorities and other employing agencies, working with Strategic Health Authorities.
5. www.commonlearning.net.
6. Throughout this paper we use ''multiprofessional education'', as defined by CAIPE to refer to occasions when professions learn side by side for whatever purpose and reserve ''interprofessional education'' for those occasions when they learn with from and about each other to improve collaboration and quality of care.
7. www.qaa.ac.uk.
8. www.skillsforhealth.org.uk.
9. www.lg-employers.gov.uk/skills/nos/index.html,www.lg-employers.gov.uk/skills/nos/index.html.
10. www.dh.gov.uk.NationalServiceFrameworks.
11.They include:
- interprofessional education in Southampton–d.humpris@soton.ac.uk
- interprofessional e-learning in Coventry and Sheffield–p.blateau@coventry.ac.uk
- interdisciplinary teaching in mental health in Birmingham–a.davis@bham.ac.uk
- assessment of learning in practice settings in Leeds–t.e.roberts@leeds.ac.uk
- curriculum and assessment development in interprofessional education in Belfast s.morison@qub.ac.uk
- placement learning in health and social care in Plymouth–susan.lea@plymouth.ac.uk
- interprofessional clinical and communications skills – m.j.nicol@city.ac.uk
- health care professional education in Newcastle – g.r.hammond@ncl.ac.uk

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Paper B1

Distinguishing between Six Domains

Chapter 5

In: Effective interprofessional education

Argument, assumption and evidence

H. Barr et al.

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Chapter 5

Distinguishing between Six Domains

This chapter is the first of three that revisit conventional wisdom about interprofessional education in the light of findings from the review. It distinguishes between six interprofessional education domains. Three before and three after qualification are divided into college-led, service-led and jointly-led interprofessional education initiatives.

Introduction

Self evidently, interprofessional education takes many forms, albeit in pursuit of the same aims and applying the same principles. It can also be classified in numerous different ways taking into account its many dimensions. After testing the utility of alternatives, we selected a classification which enabled us to organise our data so that it highlighted the distinctive ways in which interprofessional education is commonly understood.

Dimensions of interprofessional education

In chapters 3 and 4 we discussed some characteristics of interprofessional education, any combination of which might be included in a classification. For example:

Explicit or Implicit
- recognised or unrecognised as interprofessional education during daily work, uniprofessional or multiprofessional education

Discrete or integrated
- freestanding or built into professional or multiprofessional education

All or part
- wholly comprising interprofessional education or a module, elective or strand

General or particular
- providing a generic overview of interprofessional practice or focusing on a particular client group, practice method or work setting

Individual or collective
- focusing on the learning by the individual participant or by the group

Work-based or college-based
- in the participant's workplace or educational institution

Work-led or college-led
- under the auspices of a service agency or an educational institution

Shorter or longer
- lasting from minutes to years

Sooner or later
- before qualification (earlier or later in the course), or at some stage after qualification

We combined two of these characteristics to formulate an initial classification as follows:

- College-based pre-qualifying interprofessional education
- Service-based pre-qualifying interprofessional education
- College-based post-qualifying interprofessional education
- Service-based post-qualifying interprofessional education

Careful inspection of our systematic review database and critical discussion of the conceptual differences between these categories confirmed that the distinction between pre- and post-qualification was helpful, but the utility of the distinction between college-based and work-based was questionable. Some examples were both, others were neither, i.e. located in hotels and conference centres or delivered by means of electronic or open learning.

More fundamental to creating a meaningful category of interprofessional education is not *where* an initiative is sited but rather which setting *leads* the development and quality assurance of an initiative. We identified three categories (table 5.1) and noted the high level of service-led initiatives and relatively low level of jointly led initiatives.

Lead institution	**Frequency**
College-led	37 (35%)
Service-led	56 (52%)
Jointly-led	14 (13%)

Table 5.1: Interprofessional education and lead institution

Combining pre- and post-qualification with organisational leadership creates six domains for interprofessional education as follows:

- College-led pre-qualifying interprofessional education
- Service-led pre-qualifying interprofessional education
- Jointly-led pre-qualifying interprofessional education
- College-led post-qualifying interprofessional education
- Service-led post-qualifying interprofessional education[1]
- Jointly-led post-qualifying interprofessional education

Table 5.2 indicates how studies from the review were distributed in each of these six domains:

	Institutional lead		
Stage of interprofessional education	College	Service	Joint
Pre-qualification	12	-	8
Post-qualification	24	56	5

Table 5.2: Stage of interprofessional education and lead institution[2]

[1] More often referred to as staff development, in-house training or continuous professional development (CPD).

Division into these six domains enabled us to distinguish between characteristics of interprofessional education by type. Pre-qualifying studies lay foundations for post-qualifying studies along a continuum. Each, in an ideal world, would be planned to complement the other as part of progressive sequences of learning. Similarly, college-led and service-led studies would be mutually reinforcing.

Each of the six domains is discussed below, showing the relationship between uniprofessional, interprofessional and in one instance multiprofessional education.

Domain 1: College-led pre-qualifying interprofessional education

We begin by building models for the inclusion of pre-qualifying interprofessional education which is college led. Each model has a corresponding figure. Each includes five (white) rectangles representing uniprofessional programmes, showing how interprofessional education (shaded) has been introduced. There may be more or less than five programmes in reality.

The Extra-Curricula Model

Requirements for licence or validation, pressures on crowded curricula, and sometimes resistance from teachers, can make for difficulties in introducing interprofessional education within and between professions-specific curricula. This argues for assigning pre-qualifying interprofessional education to the margins outside class contact hours for studies required in preparation for awards, which we call the Extra-Curricula Model (see Figure 5.1). (Alternatively, as we discuss below, interprofessional education may be undertaken outside college teaching by linking it with placements.)

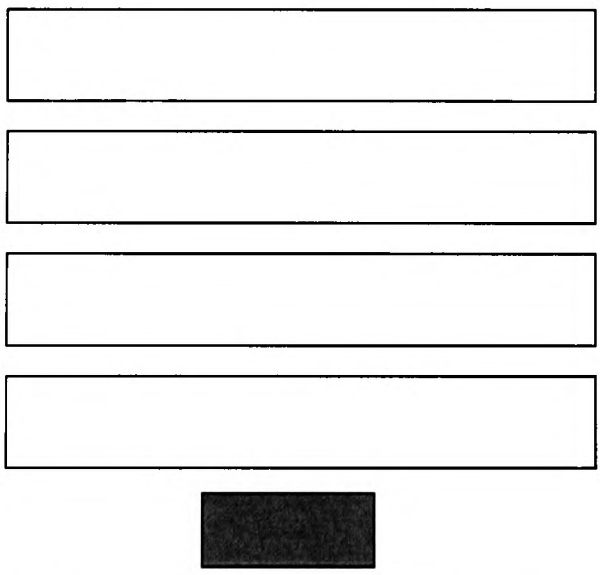

Figure 5.1: Extra curricula model

Box 5.1 provides an example of the extra curricula model.

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[2] This table excludes two 'mixed stage' (for pre and post qualifying students), one of which was college led and one was jointly led.

Students for nine different health and human services professions took part in two day-long team experiences at the University of British Columbia in Canada. Objectives and content – teambuilding – complemented the professional programmes. Assessment was informal and related to teams – not individuals. It did not count towards course credits. Meetings were held on Saturdays to avoid timetabling problems. Each student was paid $100 to encourage attendance, although feedback suggested that many would have done so anyway. Recruiting teachers (with no extra payment) proved to be more difficult.

Box 5.1: Saturday school (Gilbert et al., 2000)

This model offers a simple, unthreatening and painless way to implant small-scale interprofessional education where institutions and their staff are not yet ready for its integration within professional programmes or institutional support for major developments has not yet been secured. Its adoption obviates the need to negotiate changes in profession-specific curricula and to seek approval for major modifications or re-validation. Successful adoption of the extra curricular model may pave the way for integrated models later.

Meanwhile, achievements may be modest. Students may accord less value to marginal interprofessional studies than to their mainstream professional studies, especially if assessment and credit is lacking. They may also be left as best they can to resolve disjunctions between professional and interprofessional learning.

Much may depend upon whether teachers as well as students from the professional programmes participate, the enthusiasm with which they do so and their readiness to help students to relate professional and interprofessional learning.

The Crossbar Model

A more integrated model (Figure 5.2) introduces one or more shared learning sequences represented by one or more horizontal bars across college-based pre-qualifying studies. These crossbars may extend to all professions included in the overall plan or be limited to some. They may comprise multiprofessional (light grey) and/or interprofessional studies (dark grey).

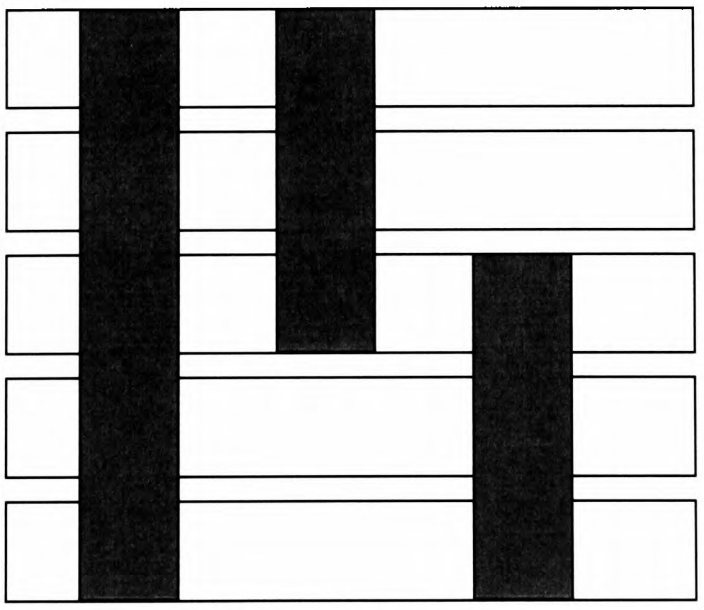

Figure 5.2: Crossbar model

Themes, for example, ethics or communications, ceded from professional courses or introduced anew, are included in cross-cutting bands of study which bind the uniprofessional programmes together. Derived thus, these crossbars only become interprofessional if and when interactive and collaborative learning is built in. Changes may be necessary in profession-specific curricula, calling for approval of modifications, but confined to mutually agreed themes or topics. Box 5.2 offers an example of the cross-bar curriculum.

The Graduate Entry Programme (GEP) is an interprofessional course developed by St Bartholomew School of Nursing and Midwifery and the School of Medicine and Dentistry, Queen Mary University of London. The course offers graduate pre-qualifying students a fast-track route into either medicine or nursing. Students undertake a number of interprofessional modules that occur at certain points in their curricula. In the first year they participate in PBL sessions aimed to cover the core knowledge, skills and capabilities that are required by both professions, including the fundamentals of pathology, ethics and law, pharmacology and communication skills. In the second year (final year for the nursing students), the students share opportunities to reflect together as an interprofessional group on their experiences of a range of clinical placements. The medical students' third year is entirely uniprofessional for its college-based elements but the final year provides the opportunity to work on an interprofessional basis as students spend time in a shadow junior doctor attachment.

Box 5.2: A graduate entry programme for medical and nursing students (Queen Mary University of London, 2004)

In some cases cross-cutting curricula have been introduced as a block of joint study for an initial period before students embark upon their profession specific studies as pioneered in a classic and highly acclaimed programme in Sweden (see Box 5.3) which influenced subsequent developments elsewhere.

Interprofessional education was introduced in 1984 at the University of Linköping in Sweden for students from six professions to promote

- a holistic approach to health and disease
- Patient centred education
- Close contact with primary care and preventive work
- Team training
- Coverage of previously neglected research areas

Interprofessional education, it was envisaged, would create flexibility, adaptation to change in occupational roles and collaborative research. Students spent their first ten weeks in a combined programme addressing these and other issues, assisted by teachers from all six professions. Learning was problem-based throughout. Themes included life stages, cultural differences, human development, life style and handicap, informed by health economics, health information, medical technology, sociology, social anthropology, ethics and management. After the ten week period students entered their profession specific programmes, but with intermittent interprofessional sessions, seminars and theme days. Common sessions were also included for two or three professions together during clinical training to highlight patient care from different perspectives.

Box 5.3: Beginning Together. (Areskog, 1988, 1992, 1994, 1995a&b)

A further development embeds the crossbar model within a multiprofessional context. In its most radical form, it starts by defining common curricula deemed to be applicable to all the professions to be included within which profession-specific curricula are embedded. We have chosen one example from a number of the UK pre-qualifying programmes which have gone this far (see Box 5.4).

The University of the West of England in Bristol introduced interprofessional learning into pre-qualifying programmes for ten health and social care professions for over 700 students. The identity of the individual professions was to be preserved and, where possible, enhanced within an overall curriculum which sought to build collaborative skills.

The curriculum framework comprised:
- a variety of shared learning modules
- discrete pathway modules for each profession
- interprofessional learning

The shared learning modules were multiprofessional for those professions needing the same knowledge base. Interprofessional learning permeated the whole programme throughout students' pre-qualifying education. It was interactive using enquiry-based learning and client-centred scenarios complemented by case-based learning on placement. Interprofessional learning was progressive. Interprofessional outcomes had to be explicit in uniprofessional pathway modules and uniprofessional practice placements.

Box 5.4. Embedding uniprofessional and interprofessional in multiprofessional curricula (Barrett et al., 2003)

Most colleges also carry responsibility for practice learning on placement during pre-qualifying studies and interprofessional education maybe embedded here.

Another application of the cross bar model is where interprofessional education is introduced in the form of a practice placement for groups of students visit a patient in her own home (see Box 5.5). Each student tends to see the client through different eyes, focusing on what they have been taught to see, but filtering out other things. Given skilled facilitation, differences in perception provide many and varied opportunities for interprofessional learning when each group back to the class.

Leicester Medical School in England developed a sophisticated process of observation, originally for medical students, but later extended to include nursing and social work students. The object was to give students opportunities to observe and assess patients in the social, cultural and economic context of a deprived inner city neighbourhood. Three students, one from each of three professions, visited a patient at home and reported back. They returned to the neighbourhood to interview the patient's key worker. The complete class then planned an end of semester seminar to present their overall impressions to all the key workers although not, so far, to the patients.

Box 5.5: Joint observation. (Anderson & Lennox, forthcoming)

Others programmes within this model have introduced initiatives which enable students to compare systematically what they are learning and to get to know each other in the process. This is concurrent with doing their practice learning in the same or neighbouring locations (see Box 5.6).

> First year pre-qualifying students from medicine, nursing, radiography, physiotherapy and dietetics at King's College London and from Greenwich and London South Bank universities came together on placement to explore and analyse care from the patient's point of view and to make suggestions for the improvement of services. No prior medical knowledge was needed of the patient's condition; it was the patient's experience of care that students learnt about. Facilitators helped students to investigate a patient's journey through 'process mapping'.
>
> Four one and a half hour slots were identified in timetables to capture as many students as possible. During its first meeting, each group chose a patient experience to investigate. They defined an episode of care and agreed where investigation would begin and end. They then constructed a map to chart what was happening to the patient and who was involved, identifying gaps and conflicts in their knowledge and deciding themselves how they would find out more by the next meeting.
>
> Sub-groups then visited a clinical unit that provided care for the chosen sort of patient, identified a patient with help from ward staff, then tracked the journey helped by interviews with the patient, caregiver and staff, and reviewing documentation. Students discussed ways to improve their patients' experiences at the second and third meetings of the group. At the fourth and final meeting, they produced a written report to staff including recommendations to improve patients' experience.

Box 5.6: A process map for interprofessional learning (d'Avray et al., 2004)

Given the logistical difficulties in synchronising placement dates and locations for students from different professions (Cooke et al., 2001), the use this model may be limited.

Domain 2: Service-led pre-qualifying interprofessional education

Although pre-qualifying professional education is overwhelmingly college-led, it would be service-led if and when it follows an apprenticeship model. In that case, service-led pre-qualifying interprofessional education might be offered between two or more groups of apprentices. A more probable model is during concurrent placements in the same location where the service agency introduces interprofessional education, exemplified by a classic early 'experiment' at Thamesmead in South East London (See Box 5.9).

> Medical, health visiting and social work students coincidentally on placement in Thamesmead met during lunchtime and for a weekend retreat. Intrusion on practice learning time was kept to a minimum, save for some half day workshops. Sessions included icebreakers, games, exercises, role plays and case discussions. Participation was not assessed and did not therefore count towards students' respective qualifications. Attendance in no way interfered with practice learning requirements for students from each profession.

Box 5.7: Lunch breaks together during placements (Jaques and Higgins, 1986)

Domain 3: Jointly-led pre-qualifying interprofessional education

This domain is becoming more common due to increased emphasis on partnership between service providers and education providers. This is a trend that we expect to continue.

Useful examples of this type of interprofessional education can be found in Finland, Norway, Sweden and the UK which have all piloted 'training wards' where students from three or more professions learn their profession-specific practice, but also common skills and teamwork (see Box 5.7). However, establishing and maintaining training wards, or similar practice-based initiatives, is a labour intensive activity and depends upon sustained prioritisation from the host service agency. This can be difficult for service settings that have recruitment and retention difficulties, high workloads, and pressures from reorganisation or other competing initiatives. It is unlikely that this model will ever become widespread.

The Linköping training ward in Sweden was an innovative clinical placement that provided final year students from nursing, medicine, occupational therapy, physiotherapy, social welfare and laboratory technology an opportunity to work in interprofessional teams. Students collaborated to provide care to orthopaedic patients (with simple orthopaedic conditions such as hip fractures) on an eight-bedded ward. Supervision was provided by nurse facilitators who worked with the student teams. In addition, students received part-time profession-specific supervision from a consultant (who was also in overall charge of the ward), a medical registrar, an occupational therapist and a physiotherapist. Three teams of students covered the ward for a two-week period. During this time, student teams worked two shifts: mornings and afternoons. The bulk of their time was spent on the wards working together to provide care for patients. In addition, students attended team reflection sessions at the end of each morning shift. Each team's ward experience was concluded by an interprofessional care conference where all the students discussed issues relating to delivering team-based patient care.

Box 5.8: Acute clinical placement in Sweden (Wahlström et al., 1996, 1998)

Domain 4: College-led post-qualifying interprofessional education

Initiatives under this heading are typically introduced for one or more of the following purposes:

- To fill gaps in pre-qualifying studies by strengthening academic and research foundations
- To reinforce specialist fields across professions
- To introduce new models of care
- To prepare for progression from practice into management, teaching or research
- To facilitate interprofessional learning

They may also be introduced to deploy scarce expertise optimally and to ensure viable numbers where professions singly cannot justify courses of their own.

Courses are shared by the participant professions and content is typically multiprofessional rather than interprofessional, although many multiprofessional masters' programmes in the UK have introduced interprofessional learning subsequently in response to the changing demands of practice and pressure from participants (Storrie, 1992) (see Box 5.11).

> Birmingham University offered a two-year, part-time (one-day per week) interprofessional course for community mental health practitioners. The course was developed and delivered in collaboration with a number of stakeholders, including local mental health trusts, social services departments and service users (who also participate in the evaluation of the programme). Open to nurses, occupational therapists, social workers, psychologists and psychiatrists, the course offered participants teaching sessions focused on psychosocial interventions that incorporate an interprofessional focus. In addition to undertaking classroom activities, participants carried out practice-based projects in their workplace. The completion of a series of assignments and a portfolio lead to either a postgraduate certificate or diploma in community mental health. Participants could also complete a dissertation that led to the award of a Masters degree in the subject.

Box 5.9: An award bearing community mental health course. (Barnes et al., 2000a&b)

The Cross-Curricula Model

At first sight the post-qualifying cross-curricula model is the same as the pre-qualifying crossbar model, but there is a critically important difference. Combined studies now comprise discrete blocks and they tend to be combined with multiprofessional education (light grey blocks) rather than with uniprofessional (white blocks), with cross cutting interprofessional education (dark grey) (see Figure 5.3).

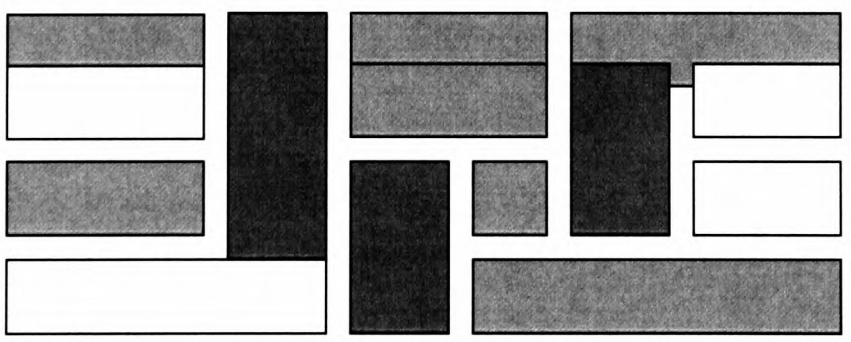

Figure 5.3: Cross curricula model

Figure 5.3 illustrates how practitioners from each profession can mix and match discrete studies with interprofessional studies shared with colleagues from other professions. Which studies are shared with whom differs in time and place, taking into account opportunity, choice and circumstance, in a largely free market where provision is always changing, constrained only when regulatory bodies specify particular courses or impose requirements during the validation process.

Interprofessional education at the post-qualifying stage may be relatively free from requirements made by regulatory bodies and can therefore be introduced with fewer

complications. It may also have more immediate impact on practice and may consequently appeal to employers and funding bodies. Nevertheless, each profession must still protect time and opportunity to refine, reinforce, update and develop profession-specific knowledge and skills.

Freestanding post-qualifying programmes have been linked within credit accumulation schemes counting towards qualifications. This enables workers to select shorter programmes to meet priority learning needs without prolonged absence from work. Schemes such as this are particularly apposite when participants are required to include interprofessional elements in their study pathway (see Box 5.12).

The Interprofessional Postgraduate Learning Plan (Interplan) enabled mostly part-time participants from diverse professional and occupational backgrounds such as health, social care and community development to choose between a wide range of modules to select pathways of study best suited to their needs and interests within constraints set for the award of a certificate, diploma or masters degree. They also had to take at least one or both of the following interprofessional modules. First, *Collaborative Challenge* enabled students to compare collaborative practice in their employing organisations, the strategies employed, the problems encountered and the solutions found set within the context of government policies driving such collaboration and theoretical framework. Second, *Pride and Prejudice* simulated interpersonal, group, inter-group and organisation relations in working life employing psychodynamic methods. The primary focus was on facilitating participants' learning about their own, frequently unconscious attitudes and behaviour patterns and reactions towards the 'other'. For the purpose of this module, the other was located at interprofessional or interagency level, the intention being to enable participants to transfer learning from the module to their working lives. All *Interplan* modules had two distinctive features. First, learning was based on reflection, i.e. clear links are forged between practice and theory through group discussion, which was typically interprofessional. Second, all academic work during core modules had an explicit practice focus. For example, during the policy module, as participants analysed a policy relevant to their practice they were expected to identify situations where collaboration between professions, organisations or sectors was critical to implementation.

Box 5.10: Systemic interprofessional education. (University of Westminster, 2004)

Colleges are sometimes invited to run in-house courses, including some interprofessional courses, on behalf of service agencies or to provide teachers and facilitators (Box 5.13).

Responding to the needs of local practitioners, tutors at the University of Pennsylvania developed and delivered a three-day interprofessional course to teams of nurses, occupational therapists, physiotherapists, doctors and psychologists working in spinal cord injury (SCI) units. To ensure that the course met the demands of the participants a needs assessment was undertaken to inform its development. The aim of the course was to offer participants an opportunity to gain knowledge and skills necessary to understand the health care needs of people with SCIs. Participants undertook a range of experiential interactive activities (brainstorming sessions, buzz groups, role play) designed to promote team building while enhancing their understanding of caring for people with SCIs. An evaluation of the course indicated that participants enjoyed this interprofessional learning experience. In addition, five-month follow-up data revealed that participants considered that they collaborated in a more co-ordinated fashion

following their involvement in the course.

Box 5.11: A college course for staff working in spinal cord injury units. (Tepper, 1997)

Many college-led post-qualifying courses have a practice component, but placements are the exception. College teachers are more likely to be involved in helping course participants to plan and conduct work-related assignments. Again, these may be interprofessional.

Students on the Master's courses comprising Interplan (see Box 5.11 above) completed a dissertation module comprising a work-based research project supported by their management. They identified a topic relevant to their daily working life that involved collaboration between different occupations, professions or agencies. An innovative feature of this module was an opportunity to involve the clients of the service as equal participants in the research or as one of the groups whose collaboration was observed and analysed.

Box 5.12: A collaborative assignment. (University of Westminster, 2004)

Domain 5: Service-led post-qualifying interprofessional education

The agenda for service-led post-qualifying interprofessional studies is primarily driven by employment needs, although progressive employers recognise that responding to the needs and expectations of the individual becomes enlightened self-interest where it improves motivation, work satisfaction and staff retention.

Interprofessional education in this domain may be determined from audits and (in the UK) clinical governance which provides a framework through which organisations are "accountable for continually improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish" (Scally and Donaldson, 1998, page 62). Clinical governance is inextricably linked with learning through appraisal.

Models for work-led post qualifying studies include the following.

Action Learning Sets

These provide a framework for work-led learning, for one or more professions within or across organisations. Participants learn together over time, usually helped by a facilitator, and calling on external learning resources as they progress (see Box 5.15).

Mindful of the difficulties that general practitioners and counsellors experience when working together in primary care teams, two groups of four general practitioners and four counsellors working in Middlesex formed an action learning set. It was agreed that a skilled external facilitator would work with both groups for the duration of their involvement in the project. The aim of both action learning sets was to identify problems related to their collaborative work and begin to find jointly acceptable solutions. The plan was to hold six to seven meetings at four to six weekly intervals, with each meeting lasting from two to four hours. In their initial meeting, both action learning sets generated a number of problem areas that needed attention, including

patient referrals, confidentiality issues, waiting list difficulties and funding. Subsequent meetings were spent discussing and agreeing how participants could resolve the problems through their collaborative work. Many proposals were successfully implemented.

Box 5.13: Action learning with doctors and counsellors. (Jenkins and White, 1994)

Continuous Quality Improvement (CQI)

CQI has been widely introduced in the United States supported by the Institute for Healthcare Improvement (IHI), the Joint Commission for Accreditation of Healthcare Organizations and others. Recognising the need to find new models for the educating health professionals, the IHI initiated the Interdisciplinary Professional Education Collaborative in 1994 to improve health care by "working from upstream" (Headrick et al., 1996, p 149). Its influence has since spread to the UK, through the NHS South West Region and Bournemouth University, and to other countries as a means to empower teams, many of them interprofessional, to effect change for the better.

Each team selects the particular improvement which it is intent on effecting and embarks on a four-stage 'plan', 'do', 'study' and 'act' (PDSA) cycle for learning and improvement (Cleghorn and Headrick, 1996), often assisted by an external facilitator. Numerous evaluations, including several published in a themed issue of the *Journal of Interprofessional Care* (Volume 14, Number 2, May 2000), demonstrate not only that the chosen objective was achieved, but also that participants learned from each other and team cohesion was strengthened.

Staff based at Sydney Children's Hospital in Australia established a quality improvement initiative, based on the principles of PDSA, designed to enhance the delivery of care for children with acute asthma. Initially, staff worked together for a period of four months developing evidence-based clinical guidelines for the emergency department of the hospital. Once the guidelines had been agreed, medical, nursing and pharmacy staff attended a series of interprofessional sessions where they learned how to implement them in the Department. Further sessions were held in the months following their implementation to ensure the successful adoption. Evaluation of the initiative revealed that while there was a high adherence to the guideline on managing acute asthma (captured by physician prescribing practices), there was no overall difference in patient length of stay.

Box 5.14: Quality improvement in a children's hospital. (Gazarian et al., 2001)

Practice Professional Development Planning

A working party led by the Chief Medical Officer for England (Department of Health, 1998) promoted Practice Professional Development Planning (PPDP) in primary care to develop the concept of the "whole practice" as a human resource and to increase involvement in quality development. Much of the report presents CPD as a vehicle for

individual and team learning which reconciles personal and organisational learning, but it also gave added impetus to CQI initiatives (Wilcock et al., 2003).

Domain 6: Jointly led post-qualifying interprofessional education

Our review found only five jointly led post-qualifying studies (Clemmer et al., 1999; Thompson et al., 2000; Lalonde et al., 2002; Morey et al., 2002; Treadwell et al., 2002) but, as in domain 3, the increasing importance attached to partnership means that we expect these studies to be the beginning of a growing trend. The studies to date show interprofessional education in this domain to be a diverse activity involving a variety of different professions, learning methods, aims and settings. Examples of initiatives falling within this domain can be found in Box 5.17 and Box 4.1 in Chapter 4

University and service staff collaborated to develop and deliver an interprofessional course to health and social care practitioners working in nine sexual health community clinics across the US. The course aimed to increase practitioners' understanding of HIV/AIDS and enhance their approaches to working together in delivering care to clients. The course consisted of a series of interactive workshops, computer-based distance learning and didactic presentations. In total, 598 health and social care practitioners from medicine, nursing, dentistry, social work, counselling and outreach work participated in these workshops. Interviews with a sample of 218 participants were undertaken. It was reported that the course had enhanced participants' ability to collaborate with other professional groups and also improved inter-agency referral rates.

Box 5.15: Interprofessional education for sexual health practitioners. (Lalonde et al., 2002)

In conclusion

The six-fold classification set out in this chapter was developed inductively from critical engagement with our systematic review database. It enables a large and complex dataset to be explored in meaningful and manageable subsets. The classification has proved a useful device for exploring the potential of different domains to support interprofessional learning. Although jointly-led interprofessional education was the exception, current UK developments point to its growing importance. The domains may prove to be durable, but the models associated with each may well change as programme planners invest imagination, ingenuity and innovation.

However interprofessional education may be classified, findings from the review point clearly to the need to distinguish between types of interprofessional education not only in structure but also in focus and outcome to which we turn in the next chapter.

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Paper B2

Competent to Collaborate

Towards a competency based model for Interprofessional education

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Competent to collaborate: towards a competency-based model for interprofessional education

HUGH BARR

Research Coordinator, Centre for Community Care & Primary Health, University of Westminster, UK

Summary *A competency-based model of interprofessional education is commended to remedy weaknesses in knowledge-based and attitude-based models. It distinguishes between 'common', 'complementary', and 'collaborative' competences.*

Key words: *Common, complementary and collaborative competences.*

Introduction

As competency-based models of professional education gain ground in the UK, a competency-based model of interprofessional education is emerging. Similar models for both should enable students to move easily between professional and interprofessional study as complementary components in a planned progression.

Introduction of a new model for interprofessional education is arguably overdue. While existing 'knowledge-based' and 'attitude-based' models may pave the way for collaborative practice, they have yet to demonstrate this convincingly.

The knowledge-based model was developed from the 1970s onwards around curricula deemed to be applicable to education and practice within and between each of the participant professions. Content, whether from policy or the contributory disciplines, incorporated commonalities of language, concept and knowledge designed, in part, to underpin collaborative practice. But some teachers came to see limitations in a model which emphasised commonalities to the detriment of differences. They realised that only when the professions learned to appreciate their distinctive qualities could they call upon one another intelligently and respond more fully to the needs of patients (Bines, 1992; Loxley, 1997; Spratley & Pietroni, 1994). Some courses therefore introduced comparative learning, using interactive methods, to enable students to explore similarities and differences in their respective professional roles and responsibilities (Barr, 1994; 1996).

Such methods had already been piloted in workshops (Jacques, 1986; Jones, 1986; Samuel & Doge, 1981) and pre-qualifying courses (McMichael & Gilloran, 1984) designed to modify reciprocal attitudes and perceptions. This model was grounded in the belief that by learning from and about one another students from different professions would come to

Correspondence to: Hugh Barr, Research Coordinator, Centre for Community Care & Primary Health, University of Westminster, 115 New Cavendish Street, London W1M 8JS, UK.

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understand their respective roles and responsibilities better, generate mutual trust and relinquish stereotypes. Rewarding experiences during the course would strengthen relationships (Berkowitz, 1975; Tajfel, 1981), which would be transferred to other members of the same professions, thereby improving collaborative practice.

Attempts to evaluate these claims have so far been inconclusive (Barr & Shaw, 1995).[1] While changes in attitude or perception were sometimes in the intended direction, this was by no means always so (Carpenter, 1995a; 1995b; Carpenter & Hewstone, 1996; McMichael *et al.*, 1984). Nor were improvements sustained when students were followed-up after the course (Shaw, 1994). Disappointment invariably prompted renewed efforts to devise more effective interactive methods in the expectation that students would then come to see other professions in a more positive light. Teachers were, it seems, reluctant to countenance an alternative explanation, namely that the methods worked well enough but the professions did not always like what they revealed about one another. That was not the only problem. Even if interprofessional education prompted changes in attitude, changes in behaviour might not follow (Barr *et al.*, 1995).

But the most compelling reason to question the sufficiency of the knowledge-based and attitude-based models springs not from the dearth of positive research findings, but from changes in the world of work.

Since those models were conceived 30 years ago, the number of professions (and specialisms within them) has multiplied making the web of working relations more complex. Old professions have made room for new, which have claimed enhanced status and extended territory as confidence, competence and credibility has grown. Patients, too, have become more powerful. Shifts in the balance of power between professions, and between professions and patients, have upset the equilibrium maintained by the more established professions. With relations in a state of flux, it has become less difficult, and arguably more necessary, for government to intervene to redraw boundaries and reallocate responsibilities between professions.

Working relations within and between organisations have also become more complex. Small agencies have given way to large, tying the professions more closely into bureaucratic structures and reinforcing the role of management. Competition and collaboration co-exist, with professionals on both sides of the purchaser/provider split, while creation of the mixed economy of welfare has divided professionals between public, private and voluntary sectors. Collaboration now applies not only to teams but also across divisions of organisations and between different types of organisation, as well as involving patients and community representatives, all of which are priorities for a new government (Secretary of State for Health, 1997).

Like collaborative practice, collaborative education must become multi-dimensional and equip professionals for the complexity of the task.

In summary, the case for competency-based interprofessional education rests upon the need to:

- Reposition interprofessional education in the mainstream of contemporary professional education.
- Enable students to relate professional and interprofessional studies coherently.
- Enable students on interprofessional courses to claim credits as part of their professional education.
- Gain the approval of validating bodies.
- Attract support from employers.
- Compensate for deficits in existing models of interprofessional education.
- Equip professionals for multi-dimensional collaboration.

- Respond to renewed government calls for such collaboration.

Persuasive though the above arguments may be, they encounter resistance. Introducing competency-based education into the professions has been far from trouble free (Ashworth & Saxton, 1990; Kelly *et al.*, 1990; Tuxworth, 1992). Not until critics have been reassured about developments in their own professions may they be ready to contemplate competency-based interprofessional education. Even then, they may seek reassurance that the intuitive, holistic and reflective qualities of the liberal tradition in interprofessional education (Schön, 1983; 1987) will not be sacrificed on the altar of a technocratic, reductionist and mechanical methodology (Jones & Joss, 1995; Rawson, 1994; Rowlings, 1994).

The makings of a competency-based model

Much of this resistance during the early 1990s focused upon the impending extension of National Vocational Qualifications(NVQs) to higher occupational levels and, by implication, the professions (Barr, 1994). This was the climate in which work started to draft the National Occupational Standards for Professional Activities in Health Promotion and Care (Care Sector Consortium, 1997; Mitchell *et al.*, 1998, p. 157, Weinstein, 1998, p. 169). Their significance lies as much in their purpose and in the process by which they were prepared as in the product. The purpose was to arrive at a single statement of practice standards to which each of the interested professions could subscribe, for itself and for collaboration with the others. The process was consultative, collaborative and consensual, as befitted the purpose. The product is on the record (Care Sector Consortium, 1997). Time will tell how far it succeeds in assuaging earlier fears and in reframing the competency debate, thereby informing the future development of interprofessional education and practice.

Meanwhile, Mitchell *et al.* assure us that collaboration is embedded in the Occupational Standards to promote effective communications, to clarify professional roles and relationships, to build and sustain relationships between professions and agencies and, adds Weinstein (1978) to assist in designing shared learning. The Occupational Standards call upon each profession to value the work of others, respecting the contribution which each makes to optimise holistic health and wellbeing.

The competent practitioner will:

- 'contribute to the development of the knowledge and practice of others'
- 'enable practitioners and agencies to work collaboratively to improve the effectiveness of services'
- 'develop, sustain and evaluate collaborative approaches to achieving objectives'
- 'contribute to the joint planning, implementation, monitoring and review of care interventions for groups'
- 'coordinate an interdisciplinary team to meet individuals' assessed needs'
- 'provide assessment services on individuals' needs so that others can take action'
- 'evaluate the outcome of another practitioner's assessment and care planning process'

While interprofessional collaboration is less than explicit in these statements, the Occupational Standards are about 'professional activity'. 'Practitioner' can then reasonably be taken to include 'professional', as well as other occupations.

In recent years, individual professions have also begun to specify collaborative competences at the point of qualification. A general practitioner should be 'aware of his/her own limitations, the skills of others', have 'the ability to refer or delegate appropriately' and be 'willing to accept appropriate responsibility for patients, partners, colleagues and others' (UKRA, 1996). A nurse (UKCC, 1989) should have 'effective teamwork skills' to participate 'in a

multiprofessional approach to care', with 'appropriate referral skills'. Similarly, a social worker should be able to 'work across organisations with other colleagues and professionals, performing appropriately in multidisciplinary situations' (CCETSW, 1995).

Numerous attempts have been made to formulate knowledge, skills and attitudes (CCETSW, 1992; Jarvis, 1983; Kane, 1976; Stevens & Campion, 1994; Vanclay 1996), or knowledge, skills and values (Weinstein, 1998; Whittington *et al.*, 1994), necessary for collaborative practice. Engel (1994) and Rawson (1994) highlight competence in adapting to change. Beresford and Trevillion (1995) call for skills in creativity, imagination and innovation. Spratley and Pietroni (1994) look for a balance between flexibility and creative thinking, on the one hand, and skills in communication and group working, on the other. Hager and Gonczi (1996) regard formulations like these as a 'richer conception' of competence which is 'holistic' not 'atomistic'.

Jones and Joss (1995) devise a cyclical model from the work of Kolb (1984), Gibbs (1988) and Schön (1987) which distinguishes between types of competence required at experiential, reflective and conceptual stages. Competences, they argue, are not discrete, but organised in structured sets required by a given situation. Others distinguish between competences at different levels (Engel, 1994; Hager & Gonczi, 1996; Hornby, 1993), which need to be related to levels of practice and management.

Interprofessionalism, says Bines (1992), necessitates the deconstruction of professional knowledge and identity and its recasting in new forms of knowledge and action. While the professions are accustomed to coming together to learn from the same contributory disciplines, competency-based approaches, she says, shift the emphasis to interprofessional collaboration and the skills needed for it. Drawing upon methodologies from one another's professions, students can explore similarities and differences in their working worlds. Interprofessional courses need to address the social as well as the epistemological aspects of interprofessionalism. These include the development of skills in communication, teamwork and the management of conflict within an understanding of the professions and their histories.

Competences characterise teams as well as individuals. They can be assessed during audit and taken into account in deploying and redeploying tasks, appointing new members, releasing members for training with an eye to overall as much as individual performance (Øvretveit, 1997; West & Pillinger, 1996, West & Slater, 1996).

Types of Competence

Whilst several sources classify competences (Hornby, 1993; Jarvis, 1983; Jones & Joss, 1995), none does so with particular reference to collaborative practice. What follows is an attempt to fill that gap by distinguishing between common, complementary and collaborative competences.

- *Common* Competences held in common between all professions.
- *Complementary* Competences which distinguish one profession and complement those which distinguish other professions.
- *Collaborative* Dimensions of competence which every profession needs to collaborate within its own ranks, with other professions, with non-professionals, within organisations, between organisations, with patients and their carers, with volunteers and with community groups.

The utility of this classification depends upon finding ways to distinguish between common and complementary competences. One person's common competence is another's complementary competence. Common competences may differ in their application, depending upon

role, responsibility, clientele and work setting. Complementary competences may best be identified in a well-functioning team where members have learnt when and how to call upon one another (Engel, 1994).

Collaborative competences then need to be formulated for each dimension, taking into account different levels of practice and management. Competences for collaboration between professional practitioners might, for example, be defined as the ability to:

- Describe one's roles and responsibilities clearly to other professions and discharge them to the satisfaction of those others.
- Recognise and observe the constraints of one's own roles, responsibilities and competence, yet perceive needs in a wider framework.
- Recognise and respect the roles, responsibilities, competence and constraints of other professions in relation to one's own, knowing when, where and how to involve those others through agreed channels.
- Work with other professions to review services, effect change, improve standards, solve problems and resolve conflicts in the provision of care and treatment.
- Work with other professions to assess, plan, provide and review care for individual patients, and support carers.
- Tolerate differences, misunderstandings, ambiguities, shortcomings and unilateral change in other professions.
- Enter into interdependent relationships, teaching and sustaining other professions and learning from and being sustained by those other professions.
- Facilitate interprofessional case conferences, meetings, teamworking and networking.[2]

Postscript

Four years ago I speculated that the extension of competency-based education to include the professions would encourage joint courses and common studies, but neglect comparative learning to improve collaborative practice (Barr, 1995). With luck, I shall be proved wrong, but there is a long way to go.

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Notes

[1] A systematic search of data bases is in progress to find reported evaluations of interprofessional education anywhere in the world which satisfy strict criteria laid down for a Cochrane Review. Findings will be reported in a future issue of this *Journal*.

[2] Reactions to this formulation will be much appreciated, through the *Journal* and its web site.

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Paper B3

Ends and means in interprofessional education

Towards a typology

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STRATEGIES FOR CHANGE

Ends and Means in Interprofessional Education: Towards a Typology

HUGH BARR

Centre for Community Care & Primary Health, University of Westminster, London, UK

ABSTRACT *Interprofessional education is a subset of multiprofessional education, capable to a greater or lesser degree of promoting collaborative practice. While a curriculum for multiprofessional education comprises common content, for interprofessional education it also needs comparative content. Only then can each profession learn what the others do, in preparation for collaborative practice. Teachers look to the students to make such comparisons by calling upon their experience. 'Interactive learning' methods facilitate this. Five types are described, which complement 'received learning'.*

While university-based interprofessional education can predispose students towards collaborative practice by modifying attitudes and perceptions, work-based interprofessional education can result directly in collaborative practice, but in a specific context.

Other variables thought to determine outcomes from interprofessional education include its location, its stage in relation to students' education and experience, duration, pattern and, where applicable, requirements for validation. These all influence the selection of content and learning methods, the relationship between theory and practice, and hence outcomes.

This paper calls upon findings from a review and survey of interprofessional education for health and social care in the UK to develop a framework which may well have wider application. A glossary of terms is appended to the paper.

Introduction

Radical reforms in higher and vocational education are greatly increasing the number of occasions when health and social care professions learn together in the UK. At the same time, 'joint training' or 'shared learning' is commended in

Address for correspondence: Professor H. Barr, 20 Rangers Square, London SE10 8HR, UK. Fax: (44) 181 265 2888.

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child protection, community care, primary health care, public health and other fields to promote collaborative practice (Barr, 1994a).

There is, therefore, a need to distinguish between those occasions when students simply learn together (multiprofessional education) and those where they do so with the object of promoting collaborative practice (interprofessional education). There is also a need to distinguish between types of interprofessional education in terms of ways in which each promotes such collaboration.

Objectives

Modifying Attitudes and Perceptions

The most commonly stated objective for interprofessional education is to remove negative stereotypes held by professions about one another. The inference is that all will then be well in their working relations. However successful initiatives may be in effecting such change, informed opinion no longer believes that it is enough.

Enhancing Motivation

Motivating students to collaborate may be implied when they develop more positive reciprocal attitudes and perceptions across professions. It may also be implied when they report satisfaction with their experience of interprofessional education. It is, however, rarely made explicit.

Acquiring Collaborative Competences

Another missing ingredient is the ability to translate attitudes and intentions into action, an omission which becomes increasingly glaring as competence-based learning gains credence throughout professional and vocational education in the UK. In spite of controversy surrounding competence-based learning in health and social care (Kelly *et al.*, 1990; Barr, 1994b), its relevance to interprofessional education is now being debated, and attempts are made to formulate collaborative competences.

As early as 1976, Kane identified skills thought (from experience in the USA) to be required by members of interprofessional teams (Kane, 1976) reported by Hey *et al.* (1991). In summary, these were: group process, communication, resource management, team analysis and problem-solving. More recently, Whittington *et al.* (1994) invited newly qualified social workers in the UK to rate the importance which they attached to skills in working with other organizations and professions. These included networking, communicating, managing confidentiality, forming cooperative relationships, negotiating and handling conflict.

None of the competences listed are peculiar to collaborative practice. All apply to practice within, as much as between, professions. The challenge then, is not to generate some wholly new construct, but rather to identify collaborative

competences in the practice of each and every profession, and then to develop them for collaborative practice.

Curriculum Content

Common Content

Both universities and employing agencies increasingly favour common content, albeit for different reasons. Universities see it as a way to optimize the use of scarce teaching resources, to obtain economies of scale and to widen students' choice. Agencies see it as a way to cultivate a more broadly-based and more flexible workforce, geared to organizational rather than seemingly narrow professional needs and less prone to restrictive practices (Barr, 1994a).

During pre-qualifying studies, common content typically includes themes from the health and social sciences. During postqualifying studies, it updates knowledge, strengthens academic foundations, introduces new practice methods, prepares students for new roles, assists in implementing policies and effects organizational change.

Determining common content can be painstaking and painful. It calls for joint planning between all the parties, for give and take, and for sensitivity regarding one another's preoccupations, before formulae can be found to which all can subscribe. Delivering common content can be no less difficult, calling for awareness of different assumptions, perceptions, languages and styles of learning, profession by profession.

Specialist Content

In spite of these problems, the pressures to maximize common content is becoming irresistible, so much so that it is increasingly hard to preserve and protect specialist content for each profession. Small wonder if professional associations see the search for commonalities as a threat to members' claims to distinctive knowledge and skills.

There are, however, interprofessional as well as professional grounds for concern. Collaborative practice depends, not only upon establishing a common framework of knowledge, but also upon mutual understanding between the professions, understanding which respects and uses differences in response to the multiplicity of patients' needs. While multiprofessional education can be (and often is) defined exclusively in terms of common content, interprofessional education can only fulfil its purpose when it is complemented by specialist content.

Comparative Content

The bridge between common and specialist content is comparative content, in other words opportunities for the professions to learn about one another, their

respective roles and functions, powers and duties, opportunities and constraints, and joys and sorrows. That, however, is rarely treated as content, rather as method, to which we now turn.

Learning Methods

Interprofessional education applies principles of adult learning. Students take responsibility for their own learning, individually and collectively, with the emphasis upon collaboration rather than competition. Each becomes a resource for the others. The teacher becomes a facilitator, attuned to the dynamics of interprofessional learning, skilled in optimizing learning opportunities, valuing the distinctive experience and expertise which each of the participating professions brings.

What follows is an attempt to classify learning methods commonly used in interprofessional education in the UK. The basic distinction made is between '*received learning*' and '*interactive learning*'. The latter is subdivided into five methods, which are not mutually exclusive. They subsume other learning methods to be found in the literature (Barr & Shaw, 1995).

Received Learning

Lectures and written materials constitute received learning, upon which multiprofessional education relies heavily. Informed opinion, however, inclines to the view that interprofessional education also needs interactive learning (Barr, 1994a).

Exchange-based Learning

Many of the early UK examples of interprofessional learning (e.g. Jacques, 1986; Jones, 1986) were noteworthy for the flair and imagination with which they stimulated exchange between the professions. Credit for importing a theoretical underpinning for such learning goes to McMichael at Moray House, Edinburgh. She and her colleagues were exercised about the negative stereotypes which students in community work, primary school teaching and social work held towards one another. These stereotypes tended to become more pronounced and more negative as the parallel courses progressed. Recognizing the College's responsibility for correcting that trend, they turned to contact theory as expounded by American social psychologists, who argued that people liked those who were rewarding to them (Berkowitz, 1975), while the approval of others reduced anxiety and enhanced self-esteem (Aronson & Linder, 1965).

Numerous ways were tried to prompt exchange between the three professional groups, with varying degrees of success. They included workshops to expose thoughts and feelings to one another triggered by self-completed questionnaires

and rating scales. Other approaches included debates about ethical issues, games, role-plays, discussions about communication problems, case studies, and exercises in priority setting and conflict resolution (McMichael & Gilloran, 1984; McMichael *et al.*, 1984a; McMichael *et al.*, 1984b).

Woodhouse and Pengelly (1992) introduced an alternative theoretical orientation. They extended psychodynamic understanding of transference between patient and worker to situations where more than one worker was involved, illustrating by means of case studies how this affected relationships between them and, writ large, between professions and between agencies. Building on the work of Menzies Lyth (1970), they found that anxiety led to rigidity in working practices and inhibited collaboration, something which interprofessional education could help to redress.

Observation-based Learning

Many initiatives have introduced observation-based learning, with varying degrees of sophistication. Some have created opportunities for students from different professions to make joint visits to patients in their own homes, with subsequent opportunities to compare perspectives before making joint presentations to fellow students (Jones, 1986; Carpenter, 1995a and 1995b; Carpenter & Hewstone, 1996).

The University of Westminster (Westminster, 1994) has adopted and adapted psychoanalytical methods for observation-based learning developed at the Tavistock Clinic (Trowell, 1989; Miller *et al.*, 1989; Trowell & Miles, 1991), and related them to Schon's concept of the reflective practitioner (Schon, 1983, 1987), which has gained popularity in interprofessional education.

Action-based Learning

The term 'action-based learning' is in common currency in general education. As used here, it embraces problem-based learning (Barrows & Tamblyn, 1980), which is a more familiar term in interprofessional education, and collaborative enquiry.

The World Health Organization (WHO) commended *problem-based learning* as the means to promote collaborative practice (WHO, 1988). Its exhortation has been made operational to critical acclaim at Linköping in Sweden, where such learning is built into joint studies for first-year undergraduate students in medicine, nursing, physiotherapy, occupational therapy, medical laboratory technology and community care management (Areskog, 1994, 1995). Linköping's lead has been followed, most notably in the UK, by University College, Salford (Lucas, 1990; Davidson & Lucas, 1995).

The most sustained use of action-based learning in the UK was during a series of workshops mounted to promote health education in primary health care teams

(Spratley, 1990a, 1990b). Each team, comprising not less than three practitioners from different professions in the same primary health-care centre, engaged in a joint task. They established a base-line from which to develop preventive educational strategies, located target audiences, identified inhibiting and facilitating factors, and devised means of evaluation.

Collaborative inquiry offers an alternative approach, which draws upon the work of Reason (1988, 1991, 1994). As described by Glennie and Cosier (1994), it is a method of action research which enables members of a peer group to explore their own practice, or a commonly agreed issue, in an iterative cycle of action, reflection, generalization and planning. They see it as a process which empowers and develops participants' ability to understand, operate in, and modify their own working environment. The utility of collaborative inquiry in interprofessional education has been tested in Northamptonshire (Cosier & Glennie, 1994; Stevenson *et al.*, 1992), and by the Marylebone Centre Trust (Spratley & Pietroni, 1994).

Simulation-based Learning

Many initiatives include simulation exercises. One comprises a simulation exercise in its entirety. Convened by the Tavistock Clinic and the Marylebone Centre Trust, each 'Pride and Prejudice' conference brings together experienced practitioners, teachers and managers from a wide range of professions. Living and working together, they participate in small groups, large community meetings and consultancy workshops which Stokes (1992) describes as a 'temporary laboratory' within which to understand psychological, group and organizational processes better, with the aid of psychodynamic and organizational insights, with particular reference to interprofessional and interagency collaboration.

Practice-based Learning

Lastly, part-time postgraduate initiatives often require students to undertake assignments in their place of work, which may involve other professions. These assignments range from writing up aspects of agency policy, to practice in relation to course teaching and applying research methods taught on the course, to questions to which the students' agencies want answers.

Some undergraduate initiatives arrange for students to visit and, less often, to have practice placements with other professions. Negotiating and supervising such placements can be difficult and time-consuming, although students can learn much about the other profession and their own. Similarities and difference in value and knowledge bases and in practice skills can be explored, thereby providing foundations for collaboration (Anderson *et al.*, 1992).

Variables Affecting Outcomes

The choice of content and learning methods plainly bears upon the outcomes of interprofessional education, as do the following.

Location

Work-based initiatives tend to be task-specific. University-based initiatives enjoy time and space to take a broader and more reflective view of collaborative practice, assisted by the diversity of experience which the students bring. Work-based initiatives can, however, deliver collaborative practice. When tackling tasks whose fulfilment depends upon joint action, collaborative practice is integral to both process and outcome. The issue is whether it continues afterwards and whether it is transferable.

University-based initiatives may nevertheless lead to more rounded understanding of collaborative practice, applicable in more diverse situations, although that has yet to be substantiated. Immediacy is, however, lacking. Although students may undertake collaborative assignments in the workplace, outcomes are diffuse, difficult to measure and dependent upon the co-operation of colleagues outside the course.

Duration

The shorter the initiative, the more selective its content and methods must be, and the more specific its objectives. Interactive learning (if and when included) must be accelerated, intensive and contrived. The longer the initiatives, the more diverse the content, learning methods and objectives can be. Interactive learning can be less pressurized, allowing relationships between professions to unfold and mature more naturally.

Validation

Initiatives leading to academic awards are subject to validation by two or more external bodies, e.g. the Central Council for Education and Training in Social Work and the English National Board for Nursing, Midwifery and Health Visiting, whose respective regulations must be met. Scope for innovation is, therefore, limited, especially at the pre-qualifying stage (where requirements are tightest), less so at the postqualifying stage.

Stage

Pre-qualifying initiatives have to overcome objections that interprofessional education is premature until students are secure in their respective professional roles and identities, and have experience to share. This may explain why many pre-qualifying initiatives, at least in the UK, have been confined to closely-related professions, for example, branches of nursing (Gill & Ling, 1995) and

professions allied to medicine (Lucas, 1990; Davidson & Lucas, 1995; Forman *et al.*, 1994). However, that is changing.

What then are the realistic outcomes from pre-qualifying initiatives? First, they are preventive, mitigating against invidious comparisons between the student's own and other professions which harden into negative attitudes that cannot easily be dislodged later. Second, these initiatives are preparatory. They lay foundations upon which students can build during their subsequent practice as they learn from other professions with whom they collaborate. They will then be able to take advantage of opportunities for interprofessional education in continuing professional development and postqualifying studies.

How then do outcomes from postqualifying initiatives differ from pre-qualifying interprofessional learning? It seems more realistic and more reasonable to expect graduates to engage in collaborative practice. Many are senior enough to influence change in their agencies. All are established practitioners, teachers or managers who bring first-hand experience (good, bad and indifferent) of working with other professions. Learning about collaboration should, therefore, equate closely to real-life situations and be readily applied in everyday practice. When, where and how that is done must, however, be a matter of judgement, in the light of opportunity.

Structure

Finally, allowance must be made for differences in the structure of initiatives. Work-based and part-time students can relate theory and practice as their courses progress. Immediate impact on collaborative practice will, therefore, be a possibility. Full-time students lack such concurrent practice. Placements, if and when provided, can create only limited scope to apply collaborative learning. Impact upon collaborative practice must inevitably be postponed.

Evaluation

While nine out of every ten initiatives reported in the 1994/95 survey of interprofessional education in the UK (Barr & Waterton, 1996) were said to have been evaluated, only one in four had been written up and even fewer had been published. Indeed, Barr & Shaw (1995) had found only nineteen published evaluations of shared learning in the UK since 1980. Many of these evaluations concentrated upon process. Outcome measures more often referred to the participants' satisfaction with the initiative than its benefits for their practice. Before and after measures of changes in attitude or perception were the exception, while none had attempted to measure acquisition of competences. Only one evaluation included a control group. It was also the only publication to follow up respondents after they had completed their education. Even so, a handful of evaluations provide findings which were indicative of effectiveness,

while also testing methodology which merited replication, refinement and development.

McMichael, Irvine and Gilloran (1984) evaluated the series of Moray House initiatives by administering questionnaires to students before and afterwards. The findings were mixed. While the attitudes of school teachers towards community workers and social workers improved, this was not reciprocated. Furthermore, changes were confined to less than a quarter of the group.

Carpenter and Hewstone (1996) evaluated interactive group learning between medical students and social work students in the final year of their pre-qualifying courses in Bristol. They asked students to complete a questionnaire which included seven-point scales to rate their perceptions of the initiative and of their attitudes towards their own and the other group. On completion of the initiative, some of these questions were repeated. Before and after data were compared. Findings showed that attitudes towards the other group had become significantly more positive, while those towards their own group remained constant. Applying the same methods to a similar programme for medical and nursing students, Carpenter (1995a, 1995b) again found that attitudes towards the other profession changed for the better.

Shaw (1994) tested a number of ways to evaluate the impact of an Open University course about learning disabilities used, with varying degrees of interaction, by mixed groups of health and social-care practitioners. He found positive and significant changes in perception by students in the direction of understanding other carers compared with the control group. However, five months later the difference had largely disappeared.

These and other studies suggest that interactive learning can, under favourable conditions, modify attitudes and perceptions in the direction of collaborative practice. Evaluations of changes in motivation and competence have, so far, been conspicuous by their absence.

Some Priorities for Future Development and Research

Towards a Typology

Further progress in comparing initiatives for interprofessional education plainly depends upon devising a framework within which like can be compared with like. While this paper has identified some of the variables, it is no more than a beginning.

Testing Hypotheses

Within that framework, hypotheses can then be formulated to test claims made for specific types of initiative. Studies will need to select variables to be evaluated, singly and in combination, in relation to desired outcomes, while holding other variables constant.

Devising Additional Research Instruments

New research instruments will need to be designed and tested to measure motivation and competence. Such instruments should then be used in combination with those which already measure changes in attitudes and perception.

Towards Competence-based Learning

Collaborative competences will need to be defined and tested in that context. Competence-based learning will have to be embraced if interprofessional education is to secure its place in emerging models of professional and vocational education. Only then will interprofessional education be ready to subject its outcomes to critical review in terms not only of collaborative attitudes but also collaborative behaviour.

Willing the Means

If, after critical evaluation, particular types of interactive learning prove to be the key which can turn multiprofessional education into interprofessional education and unlock the door to collaborative practice, additional investment will be inescapable to provide small groups with suitable accommodation, generous staff/student ratios, and preparation for teachers. Cost/benefit must, however, be demonstrated, before arguments for additional investment can hope to prove persuasive.

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Appendix A

Glossary of Terms

University: university, college or other recognized institution of learning.
Education: education and training in university, at work or elsewhere.
Initiatives: interprofessional conferences, courses, seminars, workshops, open learning and work-based learning.
Open learning: study without formal entry requirements, undertaken individually and/or in small groups, normally in the students' own time, where they choose and at their own pace.
Students: participants in university and work-based learning.
Typology: classification.

Paper B4

Approaching learning and teaching

Chapter 7

In:
Effective interprofessional education: argument, assumption and evidence.

H. Barr et al.

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Chapter 7
Approaching learning and teaching

Interprofessional education, like most uniprofessional education, is grounded in adult learning principles. It has adopted and adapted a repertoire of learning methods from uniprofessional education. This chapter describes some of them. Examples are included from the review and other sources.

Introduction

Interprofessional learning builds upon adult learning methods. The more that professional education embraces adult learning, the easier it becomes for teachers and participants to engage in interprofessional learning. Participants who have become accustomed to modern learning approaches may respond easily to interprofessional learning. Others may experience more difficulty if their general and/or professional education employed mostly traditional didactic teaching prompting them to enter into interprofessional learning as passive recipients.

Applying principles of adult learning

In this chapter we view interprofessional learning methods in the context of principles of adult learning and some of the many theories that pertain (e.g. Brookfield, 1986; Knowles, 1975; Kolb, 1984; Lave and Wenger, 1991).

Knowles (1975) said that adult learners were intrinsically motivated by the 'problems' they identified and sought to solve for themselves. Learning was therefore likely to be more permanent when knowledge had direct application to work and incorporated task-centred or problem-solving approaches.

The strength with which this belief is held in professional education and increasingly in interprofessional education helps to explain the popularity of problem-based learning to which we refer below. Such learning is active, self-directed and (most importantly for interprofessional learning) collaborative. Learners identify gaps in their knowledge and/or skills, agree what information is needed to fill them, locate sources, assign tasks and pool findings to resolve the problem.

The notion of adult learning as cyclical is informed by the work of Kolb (1984) who identified four stages in a cycle that can be entered at different points:

- initial experience
- observation and reflection
- formation of abstract concepts
- testing concepts in new situations.

Looking at the cycle with experience as a starting point for example, the learner uses observation and reflection to convert experience into ideas which are then tested in new situations.

Lave and Wenger (1991) argued that learners entered into 'communities of practice' where they learnt by participating in the life of a certain community and acquired knowledge from established community members. Learning was embedded or 'situated' in that specific context. It took place within a framework of participation rather than the individual mind.

although Elkjaer (1999) criticised Lave and Wenger's model for emphasising the context of learning over individual learning.

Calling upon Lave and Wenger, Cable (2000) saw collaboration as 'situated activity' in which learning and doing were perceived as intimately intertwined. Learning to collaborate was a dynamic construct of working, subject to constant interpretation and reinterpretation. It was not founded on a traditional, cognitive construct of learning but had social, moral and emotional dimensions. Learning and performance could not be separated. Learning was performance and the meaning of the activities in which they occurred were a constantly negotiated and re-negotiated interpretation of those held by the participants of their community of practice. Learning as participation was not simply a way of acquiring skills, but also of developing an identity and sense of belonging in a community. Differences in perspective among participants were instrumental in the generation of learning.

Organisational Learning Theory (Argyris and Schon, 1984) is closely associated with these perspectives. It is a process whereby individuals work and learn collectively to improve the quality of their working environment and the products or services they deliver. This theory underpins total quality management (TQM) and continuous quality improvement (CQI), which feature so strongly amongst work based examples of interprofessional education found during our searches of the literature. Both these approaches (discussed more fully in Chapter 9) employ organisational learning theory to enable an organisation to improve its performance as it strengthens staff morale and interprofessional collaboration, and uses resources more effectively to enhance consumer satisfaction.

We find the following analysis by Brookfield (1986) a useful springboard for reflection on the nature of interprofessional education. We add our own observations in italics with reference to interprofessional education.

- The adult learner is a self-directed, autonomous learner. The outcome of the learning is more likely to be positive if the learner chooses the direction, content and methods. *This poses immediate challenges for interprofessional education. Participants may need to explore whether their perceived learning needs and desired outcomes are in harmony and whether their preferred approaches to learning coincide. Mismatches may lead to negotiation and provide excellent opportunities for collaborative learning.*

- Teachers and facilitators need to respect adult learners' needs, personalities and learning preferences. *In interprofessional education, participants and facilitators from different professions need to accept and celebrate the diversity in the group and learn from it.*

- The experience of the learner is paramount. Life experience is both the substrata for learning and defines the particular learning needs of the individual. *Lived professional experiences, and their influence on professional attitudes and behaviour, provide bases for interprofessional exchange as participants compare perspectives and experience and sometimes challenge each other.*

- Active learning is at the heart of adult learning. *This applies especially to professional and interprofessional learning. Passive acquisition of knowledge translates poorly into practice. Active learning implies change, which may only occur if previously held attitudes and beliefs are open to challenge in a safe, supportive and co-operative learning environment.*

- Learning has to be relevant. *Interprofessional education may be instigated in response to the perceived needs of the team, the organisation, the professions or the overall service delivery system. Effective learning, however, depends upon demonstrating relevance to each participant individually.*

- Pressure to learn needs to be internalized before the participant will be motivated to learn. *Again, this is a powerful reminder that interprofessional education, albeit designed for groups, is in the final analysis for individuals.*

- The learner needs to be ready and receptive. This may result from a degree of discomfiture, where dissonance between the desired knowledge or skill and their current state is sufficient to prompt motivation to learn and change. *Effective interprofessional education generates such discomfort but in a supportive environment.*

Some Approaches to Interprofessional Education

The following list of approaches to interprofessional education has its origin in earlier work by one of us (Barr, 2002). We now revisit each of the categories in the light of the arguments, assumptions and evidence explored in this book. The list is not exhaustive; it needs to be adapted and extended as new methods come to attention and as teachers innovate. No one method is preferable; experienced teachers ring the changes depending upon students' learning needs at the time and to hold their attention. The categories are mutually reinforcing, not mutually exclusive.

Exchange-Based Learning

Numerous means are employed to enable participants to expose feelings, compare perspectives and exchange experience. Debates about ethical issues can expose underlying value differences between professions to critical review. Games, which play out working relationships between professions and between organisations, can lighten the learning, but contain serious content. Case studies can enable participants from different professions to introduce different insights and suggest different interventions as the group works towards a collaborative response.

See Box 6.7 (Chapter 6) for an example of an exchange-based interprofessional education initiative for occupational therapy, orthoptics, radiotherapy, nursing, physiotherapy, medical and dentistry students based in Liverpool. See also Box 6.5 (Chapter 6) for another example of an exchange-based initiative involving primary care teams working in the Manchester region.

Narrative based learning is an example of exchange-based learning, which encourages participants to recount stories to each other. Appreciative enquiry is one way in which narrative-based learning is employed in interprofessional education, which shifts the emphasis from problematic aspects of working relationships by inviting participants to share good experiences, for example, in working with other professions (McGruder Watkins and Mohr 2001).

See Box 7.1 for an example of narrative-based learning within an interprofessional programme for students from four different professional groups.

Medical, nursing, social work and rehabilitation therapy students based at the University of Southampton participated in a four-hour interprofessional workshop in which they listened to a family carer's experiences of caring for a relative with a terminal illness. The workshop was divided into two parts. In the first part, in small interprofessional groups students talked to one another about the similarities and differences in their respective roles and courses. In the second part, students remained in their small groups and were introduced to family carers. Students then talked to the carers to elicit their experiences before presenting their findings for a plenary discussion. Interviews and observations were collected with students and carers. It was found that participants, both students and carers, valued the opportunity to talk to one another. In addition, the students felt their interprofessional experiences had enhanced their understanding of teamwork.

Box 7.1: Narrative-based learning. (Turner et al., 2000)

Action-Based Learning

Under this heading we will consider interprofessional problem based learning, which works well at pre-qualification and post-qualification levels, and service-led post-qualification interprofessional education that occurs through quality improvement initiatives and practice guideline development.

Problem-based learning (PBL), or enquiry-based learning (EBL), is eminently suitable for interprofessional education, calling as it does on participants' experience and real life situations, and requiring group co-operation. It is not designed to resolve current problems, rather to stimulate critical evaluation of a problematic situation and to mobilise necessary learning in an autonomous and systematic manner.

PBL originated in the 1970s and was commended by the WHO as the preferred learning method for interprofessional education (1988). Box 7.2 contains an example of how PBL was employed for Canadian health and social care professionals.

PBL was selected for an interprofessional course involving community-based doctors, nurses, dieticians, social workers and pharmacists working in Nova Scotia. The aim of the course was to improve professionals' understanding of health promotion issues and the role of interprofessional collaboration in this area. Working in small interprofessional groups, participants discussed four problem-based cases linked to various aspects of health promotion and agreed 'solutions' to the problems contained in each case. An evaluation of the course revealed that participants enjoyed their interprofessional PBL and felt they had acquired a better understanding of each other's roles in relation to heart health promotion. The authors concluded that the use of PBL was an effective means of gaining knowledge about how professionals can work together in health promotion. Indeed, the emphasis of PBL on using collaboration to generate knowledge and 'solve' problems meant that it was considered highly appropriate for this interprofessional course.

Box 7.2: Problem-based learning. (Mann et al., 1996)

The evidence suggests that PBL encourages independence, team working, better integration of knowledge and deeper learning (Bligh, 1995; Foldevi et al., 1994). It clearly stimulates participants' interest (Davidson and Lucas, 1995; Spratley, 1989). Hughes and Lucas (1997) found that PBL was effective in achieving interprofessional education goals, such as learning about roles and improving interprofessional communication skills. Similarly, Howkins and Allison (1997) in their analysis of interprofessional education events found that PBL, combined with a reflective process, was the cornerstone of success. Lucas (1997), however, warned that PBL was expensive. Staff-student ratios were greater (one to eight) compared with other learning methods where at least 15 participants could be catered for in the same group although contact hours were less than for traditional modes of learning.

Action based learning also includes learning during collaborative enquiry (Reason, 1994), continuous quality improvement projects (Wilcock and Headrick, 2000) and action research. In the course of our review work we became increasingly aware of the frequency with which professions worked together to develop practice guidelines, during which process interprofessional learning was recognised as occurring or necessary. In the latter case, the provision of interprofessional continuing professional education then becomes the next logical step in the quality improvement cycle. Thus interprofessional practice guideline development may be regarded as a vehicle for interprofessional learning: a form of interprofessional education.

Practice-Based Learning

There is room for argument in interprofessional education, as in uniprofessional education, whether practice learning should be treated as method or setting. We include it here as method in accordance with general usage in the interprofessional literature, but recognise that it is also one of the settings in which other learning methods are employed.

Interprofessional practice-based learning takes many forms – out-placement in another professional setting, linked learning for students concurrently on placement in adjoining workplaces, joint placements in the same setting and purpose designed learning environments such as training wards (Reeves and Freeth, 2002; Ponzer et al., 2004).

See Box 5.7 (Chapter 5) for an example of a practice-based placement developed for nursing, medicine, occupational therapy, physiotherapy, social welfare and laboratory technology students.

Simulation-Based Learning

Again, this takes many forms. Role play can be adapted to expose working relationships between professions as participants take the parts of client, carer or practitioner from their own or another profession's perspective. The latter may leave the more lasting impression – how else can one get inside someone else's head?

See Box 6.1 (Chapter 6) for an example of an interprofessional course that offered nursing and medical students at the University of Manchester the opportunity to role play in a number of breaking bad news scenarios with simulated patients.

Skills laboratories introduced into professional education, e.g. in medicine and nursing, can be developed to include two or more professions and interprofessional perspectives on diagnosis and treatment. Working life can be simulated to create a learning environment in which one-

to-one, group and inter-group, organisational and inter-organisational relationships can be acted out.

See Box 6.8 (Chapter 6) for an example of a simulated interprofessional learning experience for nursing and medical students based in Dundee.

Observation-based Learning
This ranges from the relatively simple opportunities to shadow a worker (or fellow student) from another profession or observe a multidisciplinary team meeting, to the more sophisticated application of observational studies methods from psychodynamic theory employed in training for psychotherapists.

See Box 7.3 for an example of observation-based learning within a practice placement for nursing and medical students.

> Staff at the University of Sheffield developed an interprofessional practice placement for senior nursing students and junior medical students to provide them with an opportunity to learn together within an acute paediatric setting. It aimed to enhance their understanding of one another's role and responsibilities and to nurture mutual respect for each other's professional contribution to paediatric care. A key activity during the placement was the 'shadowing' of nursing students by the medical students. This allowed them to observe the nurses' role and appreciate the demands of delivering care to paediatric patients. The students' ward-based learning experiences were later discussed within seminar discussions. Findings from an evaluation of the placement indicated that all participants valued their interprofessional learning experiences on the ward. They also felt that there were improvements in their knowledge of one another's roles and responsibilities and their clinical skills.

Box 7.3: Observation-based learning. (Guest et al., 2002)

E-Based Learning
The increasingly widespread introduction of e-based and 'blended' learning for health and social care professions has much extended opportunities for interprofessional education. As professional education capitalizes upon advances in educational technology this is being introduced also into interprofessional education to complement and reinforce face-to-face teaching or to substitute for it. While we have included e-learning as a method, as we noted with practice learning, it could also be viewed as setting. The electronic environment can be viewed as a 'place' where approaches to teaching and learning discussed elsewhere in this chapter are undertaken. Box 7.4 exemplifies.

> Mental health professionals working separately in remote rural locations across Canada undertook a short interprofessional course that employed video-conferencing technology. The course allowed 34 physicians, nurses and social workers to participate in presentations and discussions on issues linked to the care of patients with mental health problems.

Although participants found the use of video-conferencing technology helpful for enhancing interprofessional cohesion the reliability of the equipment could be poor. Nevertheless, following a number of technical refinements, it is hoped that this programme can be expanded to incorporate other health and social care practitioners located in rural settings in the country.

Box 7.4: Video conferencing (Cornish et al., 2003)

Richardson and Cooper (2003) described an interprofessional blended learning course for research students at the University of East Anglia that incorporated virtual on-line seminars via the Internet with 'real' seminars. Box 7.5 also offers an example of blended learning.

"The Interdisciplinary Training for Health Care in Rural Areas Project", located at the University of Maine, was developed by a team drawn from the humanities, social sciences and health care disciplines as an asynchronous computer-mediated curricula comprising rural, interprofessional, problem and case study based distance learning.

Teams met face-to-face early in their development to discuss the project and to facilitate team development. Postings following meetings showed how personal relationships had been enhanced and carried over into computer-mediated communication.

All subsequent communications within and between the participating teams were, however, on-line and therefore accessible to all members. External e-mail communications were discouraged, similarly telephone and face-to-face exchanges, but when they occurred reports were to be posted.

Box 7.5: Computer-mediated interdisciplinary teams.
(Vroman and Kovacich, 2002)

Received Learning

Arguably, received learning or didactic teaching has no place in interprofessional education. By definition, such education employs interactive learning methods such as those that we have been describing – a threshold criterion we followed in our systematic review. Received learning nevertheless still has a place, used sparingly, for example to respond to informational needs by way of background or questions arising from interactive learning.

Findings from the review

In our systematic review we classified approaches to learning and teaching as follows:

- E-learning and blended learning
- Exchange (e.g. seminar and workshop discussions)
- Guideline development
- Observation (e.g. work shadowing or site visits)
- Practice learning (e.g. student placements)
- Problem-focused (PBL or problem solving activities)

- Received (e.g. lectures or presentations)[1]
- Simulation (e.g. role play)

Guideline development and problem-focused learning were discussed together under the heading action learning.

Table 7.1 summarises the approaches to learning of teaching within the interprofessional education reported in the 107 studies retained from our systematic review. Almost half the examples of interprofessional education (51, 48%) employed a single approach, for example:

- Guideline development (e.g. Heckman et al., 1998; Rubenstein et al., 2002)
- Seminar discussions (e.g. Perkins and Tryssenaar, 1994; Rost et al., 2000);
- Practice-based learning (e.g. Taylor et al., 2001; Schreiber et al., 2002).

Twenty three studies (21%) reported combining two approaches to learning and teaching, 19 studies (18%) reported three approaches and nine studies (8%) reported four approaches.

Learning methods	Frequency[a]
Exchange	56 (52%)
Received	42 (39%)
Guideline development	38 (35%)
Practice	21 (20%)
Problem-focused	15 (14%)
Simulation	9 (8%)
Observation	7 (7%)
E-learning	1 (1%)
Not given	5 (5%)
Totals exceed 107 (100%) due to the use of multiple approaches	

Table 7.1: Approaches to Interprofessional Learning and Teaching

Received (didactic) learning alone does not qualify as interprofessional education. Where employed, it was combined with interactive learning methods (27 studies, 25%), the most popular combination (15 studies, 14%) being lectures (received learning) and seminar discussions (exchange-based learning) (e.g. Lennox et al., 1998; Berman et al., 2000; Alderson et al., 2002). Seminar discussions were often combined with a range of other methods, such as problem-solving and role play (e.g. Long, 1996; DePoy et al., 1997; Farrell et al., 2001; Bailey, 2002).

The initiatives that focused on guideline development drew upon the principles of TQM or CQI to varying degrees (see Chapter 9). Most (26 studies, 24%) were located in the US. In addition, it was found that interprofessional initiatives that employed this approach tended to report changes to organisational practice (level 4a) (22 studies, 20%) or improvements to the delivery of patient/client care (level 4b) (13 studies, 12%). See Box 4.1 (Chapter 4) for an example of an interprofessional initiative that developed a clinical guideline and Boxes 4.3

[1] Studies were only included in the review if received learning was combined with at least one interactive approach

In conclusion

Approaches to learning and teaching in interprofessional education were examined through the lens of adult learning theories (in chapter nine will look at other theoretical perspectives that have been brought to bear on interprofessional education. Earlier work by Barr (2002) was revisited in the light of the arguments, assumptions and evidence examined in this book. To a great extent the approaches to teaching and learning selected for interprofessional education are influenced by the domain in which it is located (chapter 5), its focus (chapter 4) and the values it seeks to address as considered in the next chapter.

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Interprofessional education: The fourth focus.

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Interprofessional Education: The Fourth Focus

Hugh Barr

Emeritus Professor of Interprofessional Education
University of Westminster, UK

Telephone: +44 (0)20 8725 0141
Fax: +44 ()) 20 8725 0146
Email: barrh@westminister.ac.uk

Interprofessional Education: The Fourth Focus

Abstract

Three complementary and overlapping foci for interprofessional education (IPE) -- preparing individuals for collaborative practice; learning to work in teams; and developing services to improve care -- have been presented previously as a threefold classification derived from a systematic review (Barr et al., 2005). This paper adds discussion of a fourth: improving the quality of life in communities. The fourth focus is less often found in the literature and is described more fully in this paper. It embodies six approaches to interprofessional learning, discussed in the paper, that are thought to be particularly relevant to the work of *Pathways into Health* with American Indian and Alaska Native tribes, and more widely wherever collaborative learning and practice are invoked to improve quality of community life.

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Interprofessional Education: The Fourth Focus

Definition and Classification

The need for a unifying definition for interprofessional education (IPE) became pressing as it was introduced for more professions, in different countries and in different fields of practice. The most widely adopted is that commended by the UK Centre for the Advancement of Interprofessional Education (CAIPE, 1997):

> *Occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of care.*

This single definition encompasses a number of foci within IPE, each with its own approaches and methods. A classification of types of IPE is needed to describe it in all its diversity and to facilitate comparisons between programs. Numerous attempts have been made to draw up such a classification. Of these, the one most grounded empirically was derived by Barr et al. (2005), from 107 robust evaluation studies included in a systematic review. They identified three overlapping foci: preparing individuals for collaborative practice; learning to work in teams; and developing services to improve care. Their highly selected sample was almost certainly atypical of IPE at large (for details of the approach to the systematic review see Barr et al., 2005).

This paper draws upon sources in the interprofessional literature beyond those that met criteria for inclusion in the Barr et al. (2005) review in order to identify the first of, perhaps several, additional foci yet to be built into a wider conceptualization of IPE. It begins, however, with a summary of the salient characteristics of the three more familiar foci for IPE derived from the review, which the fourth focus complements.

Preparing individuals for collaborative practice

The first focus for IPE is on acquiring knowledge and improving understanding between students entering the participant professions. It is found most often in university-based IPE, increasingly at the undergraduate level, where there is an emphasis on interactive learning, and augmenting principles of adult learning. Teachers call upon a repertoire of methods to respond to different learning needs in the classroom and the workplace including: case studies, enquiry-based learning, experiential groups, debates and games. Appreciative enquiry is gaining popularity, where learning grows out of the exchange of positive experiences between professions as an antidote to overemphasis on negative and problematic relations that can be counterproductive. Another method gaining in popularity is narrative-based learning, especially where it accords with culture and custom. Rigorous evaluations examined (Barr et al., 2005) confirm that such interactive learning can, under favourable conditions, enhance mutual knowledge and understanding, generating attitudinal change and reduction of negative stereotypes.

Learning to work in teams

The second focus for IPE is on the team rather than the individual student or worker. It calls upon an understanding of group dynamics, complemented by the theory and practice

of teamwork. It is included in some university-based IPE, but (at least in the United Kingdom) less often than might be supposed at the undergraduate level (Miller et al., 2001). It is found more often in the day-by-day experience of teams, learning by doing as the leader creates time and space for reflection that turns the rhetoric of the learning team into reality (Bateman et al., 2003). 'Team development' may be complemented by 'team building', that is, exercises designed to strengthen relationships, team cohesion, and heighten motivation in pursuit of common objectives, although this seems to be the exception in health and social care; a gap that is ripe for research and evaluation studies.

Developing services to improve care

The third focus for IPE is on improving service delivery, typically employing a cyclical process such as continuous quality improvement (CQI) to effect modest but achievable change to remedy shortcomings identified by practitioners, patients or carers (Wilcock et al., 2003). Less clear is whether that learning is transferable to other fields of practice and work settings. The learning is in the doing. It is by definition work-based, although some projects include students.

The undoubted success of many CQI projects in meeting immediate objectives reinforces the view that IPE is only 'really effective' in improving care when it happens in the workplace between experienced practitioners. Work-based IPE can improve practice in ways that university-based IPE cannot, but the flaw in the argument lies in disregarding ways in which positive experiences of IPE as undergraduates may predispose and prepare students for work-based collaborative learning and development later.

The fourth focus

This paper explores a fourth focus for IPE - to improve quality of life in communities. This focus may appear, superficially, much the same as the third. Indeed, it employs some of the same approaches and methods, but there are two critical differences. First, it substitutes improving communities for organisations. Second, it substitutes quality of life for quality of care. Its outcomes benefit tribes, townships and neighbourhoods, not just the individuals and families that they comprise. It is found most often in developing countries, from which developed countries may have much to learn. However, this learning is hampered by underreporting and lack of systematic evaluation. This focus is found in developed countries in disadvantaged communities, often with minority ethnic populations. It holds the potential to bridge the gap between community work education and interprofessional education, allowing community work educators and interprofessional educators to compare and contrast curricula and identify possibilities for co-teaching and shared learning. Community work educators may then be prompted to revise their assumption that IPE focuses too narrowly on relations between professions and the healthcare of individuals, while interprofessional educators may be prompted to invite indigenous workers, community leaders and representatives to participate within a wider perception of professionalism.

This focus also overlaps with the community-campus movement. Partnerships between communities and universities differ. The more traditional partnerships cultivate links between the university and agencies in surrounding neighbourhoods to ensure enough community-oriented practice learning opportunities of the required quality for the

university's healthcare students. The more radical partnerships put the resources of the university across academic disciplines and practising professions at the disposal of those neighbourhoods to advise and assist community development and urban renewal projects. Community-Campus Partnerships for Health (Seifer & Maurana, 1998, http://depts.washington.edu/ccph/index.html) has defined principles of good partnerships and, since 1996, has acted as an integrative resource for many of these partnerships in the United States. CCPH promotes service learning as a core part of health professions education, often with IPE as an element of the service learning experience.

A myriad of approaches may improve quality of life through collaboration between communities and universities, their students and their teachers, of which six have been chosen for discussion in this paper:

- opportunities to learn about minority communities, their health status and needs
- providing community-based student placements
- strategies for recruiting professionals from minority communities
- invitations to members of minority groups to become partners in research
- reconciliation of perceptions of health care
- improving the community

These approaches are mutually reinforcing, as the examples provided will illustrate. Each might be applied to a single profession, although the examples chosen suggest that learning is more rounded when a number of professions compare their differing perspectives and responses to multiple and complex problems, and more effective when they combine their expertise.

Systematic opportunities to learn about minority communities, their health status and needs

Insert Box 1 about here

The first example (See Box 1) illustrates a highly structured approach where the University of Auckland in New Zealand took students into the Maori community, mobilising Maori teaching resources and blending interprofessional learning methods within the customs of the host culture, without compromising its lead responsibility. The powhiri was demonstrably a cogent experience, which included learning about innovative projects in the Maori communities. It may well have helped staff recruitment within that community, albeit within the 'safety' of a large student group and stopping short of engaging the students in collaborative, health improvement projects. The success of the week-long program led to lasting changes in University curricula, demonstrating how IPE can reform professional education.

Others have taken this approach further, immersing small groups of students from the majority ethnic group in the life and customs of a minority community, engaging with its healthcare needs and sometimes living with local families. Such exposure makes heavy demands on students. They learn as much about themselves as about their hosts, heightened by their vulnerability and their dependency on each other, strengthened and buoyed up by experiences which at first may be disabling. Labour intensive support and supervision of students are needed. The number of students who can benefit is, therefore, small and programs are hard to sustain.

Providing community-based student placements

Insert Box 2 about here

The second approach may seem familiar at first (see example in Box 2). It would be hard to find a school of medicine, health or social care that does not arrange community-based placements for its students. Quality of engagement with local services and neighbourhood groups is, however, enhanced and learning opportunities extended, where investment is made to cultivate and sustain relations, not only with service agencies, but also with the host community. Numerous examples might have been taken from the United States, Canada, Latin or South America. However, the one chosen for illustration is from South Africa. The experience goes well beyond simply providing opportunities for community-based practice learning, but not as far as examples that follow later in this paper.

Strategies for recruiting future health professionals from minority communities

Insert Box 3 about here

The third approach (See Box 3) also immerses students in the life of the host community, but the example chosen emphasizes another objective, namely to increase recruitment of American Indians into the health professions. The project remains a model of reciprocity, responding to the needs of Indian and non-Indian students alike, crossing cultures between minority and majority ethnic cultures, as well as professions, blending interpersonal, interprofessional and intercultural learning.

Invitations to members of minority groups to become partners in research

The fourth approach to improving quality of life in communities, described in this section, may also encourage recruitment from minority communities, but its intention is to enable communities to take control of research that affects their lives. 'Community based participatory research' (CBPR) has been developed by many universities in conjunction with community partners (see previous reference to Community Campus Partnerships) to complement community based professional and interprofessional education. CBPR is grounded in principles of inclusion and equality. It shifts the balance of power from researcher to researched, as respondents become co-participants. Learning becomes reciprocal; data are thought to be more valid and reliable as well as more accessible to scrutiny by community representatives, who formulate the recommendations. Collaboration becomes two dimensional: between the community and the research team; and between different academic disciplines and practising professions within that team. Box 4 provides an example of this approach.

Insert Box 4 about here

Reconciliation of perceptions of health care

A fifth approach to improving quality of life in communities may grow out of the four already discussed, as students, teachers and researchers begin to understand indigenous perceptions of health and health care; although comparative and systematic enquiry, such as that reported in the next example (see Box 5), is highly exceptional.

Insert Box 5 about here

The study grew spontaneously out of the students' shared interprofessional practice learning (similar to that in the examples above). It explores the relationship between bio-medical and traditional treatment and perceptions of health in ways that would be transferable to innumerable situations. It challenges, by implication, the superficiality of

much interprofessional thinking, pointing to the need to understand underlying differences in values, beliefs, customs and cultures held within the student group and between the minority and the majority cultures.

Improving the community through quality improvement strategies

The sixth approach to IPE to improving the quality of life in communities benefits from employing continuous quality improvement (CQI) as a robust and well tested method to improve health and health care, an approach more often invoked to improve the delivery of services to patients (see example in Box 6). CQI is simple, manageable and eminently practical. It can readily be employed by students and practising professionals alike at minimal cost, with relatively little facilitation after an initial trial run (see Wilcock et al., 2003).

Insert Box 6 about here

Challenging perceptions of IPE

A community focus challenges orthodox perceptions of IPE, especially in developed countries. It invites students, teachers and researchers to think creatively, to probe examples known by other names, within other movements and other cultures. The interprofessional movement has grown up within wealthy western nations, focusing mainly on the care of the individual and the nuclear family, often lacking cultural and community context. Little reference has been made in developed countries to collaborative learning and practice in developing countries where community-based efforts are much more common, but where opportunities to evaluate projects and to publish their findings are limited. But bridges are being built. Community-Campus Partnerships for Health is one. The Network: Towards Unity for Health (www.the-network.org) is another. Both those movements are well represented in developing countries and increasingly recognise the relevance of IPE to strengthen their work.

IPE approaches from developed and developing countries meet in projects for underserved and often minority communities in developed countries. Interprofessional practice breaks free from its preoccupations (important though they are) with individuals and families to engage also with communities. The range of professions involved extends beyond 'health', narrowly defined. Exponents of IPE are challenged to probe new depths of meaning and understanding of health, health care and collaborative practice enriched by greater appreciation of diversity in religion, language, custom and culture. Community becomes context. IPE becomes a channel for mutual learning about different values, perceptions, and cultures, not only between professions, but also between races.

Acknowledgement
I am indebted to Madeline Schmitt, not for the first time, for making so many helpful suggestions during successive drafts, for helping me to understand health care in the US and more especially its health improvement movements.

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Box 1: Learning About Minority Community Health Status and Needs (Horsburgh & Lamdin, 2004).

250 medical, nursing and pharmacy students from the University of Auckland met during Te wiki o te hauroa Maori (Maori Health week) to reflect on:Maori health; how Maori health issues were being addressed by health services; and the role and impact of health professionals in Maori health

The week began with a powhiri or traditional Maori welcome to a Waipapa marae (meeting house). Prominent Maori and non-Maori speakers then addressed the students, focusing on the principles of partnership, participation and protection inherent in the Treaty of Waitangi between the British Crown and the native chiefs and tribes of New Zealand. These principles were thought to be essential in understanding Maori concepts of health and illness, and the place of the tribes in policy, planning and delivery of health services. Regular lessons in the Maori language (Te Reo) during the week included songs and physical activities to improve pronunciation.

Students were assigned to interprofessional groups, each with a Maori cultural advisor. Maori teachers from the University also participated throughout the week. Learning was built around intensive case studies applying principles of interprofessional education – active, experiential and contextual learning in interactive small groups. Assessment included a poster presentation to a district health board by each interprofessional group of a new healthcare initiative, demonstrating impact on the Maori without prejudice or discrimination.

Students learned during the week that Maori have high levels of socio-economic deprivation, die earlier than other ethnic groups and have high infant mortality rates, and that many became ill or died from conditions that might have been prevented with effective health sector intervention. They learnt too that a significant proportion died from conditions related to smoking, poor diet and lack of exercise, compounded by inadequate access to tertiary care. Yet barely 5% of the regulated healthcare workforce in New Zealand was Maori.

The week was judged to be highly successful by all participants and has since been embedded in curricula for subsequent intakes.

Box 2: Providing Community-based Student Placements

Lazarus et al. (1998) described three of the seven "community-campus partnerships" launched in 1991 in South Africa with support from the W.K. Kellogg Foundation. Some 200 students from seven professions had placements in the hospital, primary health care centres, schools, crèches, community development projects and private homes in a neighbourhood called Boeshbuck Ridge. Problem-based, self-directed interprofessional learning took place in all these settings using local case studies and conducting health improvement surveys. Students were not passive learners: their projects ranged from screening for health abnormalities in the crèches to career guidance for pupils in the schools. They stayed in private homes without electricity and running water and used pit latrines, as part of their learning, with reports on family attachments included in their formal assessment.

Box 3 Recruiting Future Minority Health Professionals (Baldwin et al., 1980)

As far back as the 1970s the University of Nevada was exercised about slow progress in increasing the number of American Indians entering the health professions through its programs. Barriers were thought to be not only economic, educational and geographical, but also a lack of role models. A grant from the Health Careers for American Indians Program (HCAIP) enabled the University to launch a project designed to recruit Indian students to its highly innovative interdisciplinary health sciences program. Progress was made, but clinical experience on Indian reservations was needed, it was thought, to maintain and heighten Indian motivation to pursue careers in health care. Funding was secured in 1976 for a preceptorship program that would send interdisciplinary teams of Indian undergraduate students and non-Indian health professions' students to remote reservations throughout Nevada to conduct health screening clinics. A primary goal was to enhance motivation and interest in careers in the health professions among the Indian undergraduate students by exposing them to experiences that gave them knowledge and skills to engage in meaningful health service. The secondary goal was to enhance the motivation of non-Indian students in the health professions to serve a significantly underserved population.

The program was intensive during three weeks, working and learning in teams comprising a second year medical student, a senior nursing student and between two and four Indian undergraduate students. The first week was an in depth orientation and training involving team building and clinical skills, including communications skills, consensual decision making and cultural awareness. Each team then had two weeks in the field supervised by a medical or nursing professional and a behavioural scientist. Long hours were spent travelling or conducting clinics, usually held in schools or tribal community buildings. Living conditions varied, the team spending some nights in motels and others in community buildings or camping. The students selected their own team manager, but clinical roles were reserved for those with relevant professional backgrounds.

Fifty five students participated during the first four years of the program – 33 Indians and 22 non-Indians. They examined 1,152 clients, referring 401 to the Indian Health Service for such problems as hypertension and diabetes. The experience was reportedly an eye opener for all the students.

The primary objective was achieved. Of 64 American Indian students then attending the University, 21 enrolled in programs for one or another health discipline. There was also a 50% decrease in drop-out amongst these students in their health sciences programs. A higher than expected proportion of non-Indian students opted for primary care, working with Indian communities, and reportedly felt at ease working in a situation where they were a minority. Tensions within teams had more to do with daily living than with clinical practice. Many Indian communities reported that the screening clinics were the only time during the year when health services were provided on their reservations.

Box 4 Involving Minority Community Members as Partners in Research (Minore et al., 2002)

The Shibogama First Nations Council in Northern Ontario, supported by Health Canada, initiated an enquiry into the sporadic and inconsistent care resulting from "the health human resources crisis" in three of some 28 remote Cree and Ojibway communities scattered across the sub-arctic boreal forest. They invited a group of researchers (with backgrounds in nursing, sociology and health economics) from Lakehead and McMaster universities to engage with them in "participatory action research" to investigate the impact and costs of the lack of continuity in health care delivery. The study focused on the delivery of oncology, diabetes and mental health care, taking into account recruitment and retention of health care personnel.

Decision makers in the Shibogama Health Program conferred with the research team at every stage during the study. Changes were requested, sometimes at the last minute, and made, but sometimes with difficulty. The Shibogama Health Program identified and helped hire local fieldworkers familiar with the local culture and language, and provided interpreters. Its Nursing Supervisor helped design and pilot the audit tools, and its Executive Director intervened when vital financial information was withheld.

Expertise held by the three professions in the research team was augmented by calling in time limited help from a social worker regarding the diagnosis of mental illness in remote aboriginal communities and an expert on local heritage. Experienced researchers resident in the community facilitated access and helped to analyse and interpret data.

Outcomes from the project were presented to the Shibogama Health Council without recommendations. That task was the Council's responsibility, but not before convening a two-day workshop for community members and care providers to discuss the findings and their implications.

Box 5 Understanding and Reconciling Indigenous Perceptions of Health Care (Kiesser et al., 2006).

An interprofessional group of students at Loma Linda University in California made a prize winning study into traditional and modern medicine among Mexican-Americans. They distinguished between "medical pluralism", by which they understood an environment in which multiple modalities stemming from a variety of ethnic, cultural, religious and scientific sources form a welcome and comprehensive codex of medical practice, and "medical duality", by which they understood the dynamic tension between biomedicine and "traditional", "complementary" or "alternative" medicine (TCAM). The question, they suggested, was not which system was preferable, but how to validate, integrate and optimally deliver the full range of medical options available.

The students had witnessed the dynamic tension when conducting surveys and interviews with Latinos as part of a University outreach program, in an underserved predominantly Mexican-American community in Southern California. They had begun to understand why some segments of the population found themselves caught between two, often antagonistic, systems of care. To portray this as a choice between modern American methods and traditional Mexican methods was thought to be simplistic. It overlooked patients' wisdom in making choices, which the students found were often less culture bound than they had assumed. Personal beliefs were the windows through which patients perceived the 'pull' away from conventional medicine or the 'push' towards TCAM.

The insights derived from their experience, the students suggested, carried implications for undergraduate interprofessional education. Medical students would benefit from a public health approach, with particular reference to immigrant and minority communities. Conversely, public health students needed to understand the challenges that the biomedical community faced in trying to integrate TCAM into current medical practice, including potential dangers and possible harmful interactions. But for members of the Mexican community, the students observed, there is often no conflict as they synchronise and integrate the natural, spiritual and physical world to create a holistic vision of health.

Box 6 Improving the Community Through Quality Improvement Strategies (Knapp et al., 2000).

The excellent health of the suburban population in Monroe County, New York, masks the generally poor health status of many of the City of Rochester's downtown residents, where infant mortality rates, and poor access to care among children, among other indicators of health deficiencies, gave cause for concern. University of Rochester faculty from medicine, psychiatry, nursing, and community health, plus individuals with project management and health improvement skills, collaborated with the Monroe County Health Department to identify potential improvement projects appropriate for student involvement and limited contributions. Student teams were assembled from 'health and society' undergraduate majors, public health master's students, medical, and undergraduate nursing students and business/health care administration masters' students to participate in an interprofessional course that incorporated community improvement projects. The objective was to develop a sustainable interprofessional education model that integrated approaches to quality improvement and behaviour change to address long-term community health improvements.

The four initial projects aimed to: build success in adolescents by increasing their assets: increase access to health care for children through insurance coverage; increase access to prenatal health care in high risk areas; increase the percentage of children who never smoke cigarettes.

Each team learned how to employ a health action cycle: assessing health status; choosing priority goals; defining leadership; developing improvement plans; performing interventions; and measuring impact. Emphasis was put on gaining knowledge from the people whom the students wished to serve. Faculty and community leaders acted as facilitators, all of whom were engaged themselves in community-based health improvement.

In the light of their experience, faculty observed that students benefited, provided that activities planned and implemented with the community were responsive to "true community need" and aligned with other community activities. Faculty and their institutions needed to invest time to build trust and lay strong foundations for working with the community. They had to be knowledgeable about the health problems facing the community. Equipped with that knowledge, they became bridges between university and community and between students and residents.

Paper C1

Evaluations of interprofessional education:

A United Kingdom review for health and social care

H. Barr et al.

2000

London

CAIPE
&
The British Educational Research Association

(See: www.caipe.org.uk)

The United Kingdom Centre for the Advancement of Interprofessional Education

with

The British Educational Research Association

EVALUATIONS OF INTERPROFESSIONAL EDUCATION

A United Kingdom Review for Health and Social Care

Hugh Barr, Della Freeth, Marilyn Hammick, Ivan Koppel and Scott Reeves

August 2000

Contents

1 The Definition

Interprofessional education takes place on: -

"Occasions when two or more professions learn together with the object of cultivating collaborative practice."

CAIPE (1997)

2 The Introduction

This Review was commissioned by the British Educational Research Association (BERA) and is being published by the United Kingdom Centre for the Advancement of Interprofessional Education (CAIPE) (see Appendices 1 & 2).

It is addressed primarily to CAIPE members interested in the evaluation of interprofessional education in health and social care, but also to BERA members interested in the evaluation of a interprofessional education in other fields in the context of research into professional education as whole. We look forward to working with colleagues in BERA and CAIPE to refine and improve ways to monitor and evaluate interprofessional education and to secure a firmer evidence base to inform future developments.

The Review focuses upon evaluations of interprofessional education in health and social care in the United Kingdom (UK). BERA is picking up implications for other professions travelling similar roads towards collaboration in learning and practice as educational programmes are integrated.

The purpose of this Review is to:

- identify methods by which such interprofessional education in health and social care has been evaluated in the UK;
- assist others to replicate and develop those methods.

It is a contribution towards communication and mutual exchange between activists amongst the CAIPE membership whilst opening up experienced gained in its field to critical review by the wider education research community and so to assist the future evaluation of interprofessional education.

The Review identifies variables that characterise different types of interprofessional education and locates the 19 selected evaluations within that framework. Appendix 5 reports on UK-wide surveys to put these examples in context.

An evaluation follows of the empirical work reported in the selected papers. Judgements about research design are made in the spirit of constructive criticality, aiming to highlight present deficits in, and challenges to, the difficult work of educational evaluation, especially when that is of a complex and nascent type of teaching and learning process and involves diverse learner groups. This may help to embed a culture of evaluation in the community of educators offering interprofessional education and to provide material to assist researchers with study design and reportage.

Finally, we try to relate the reported outcomes of interprofessional education to a theoretical model of evaluation and, through this, to comment on what the papers selected for this Review can offer by way of answers to questions about whether interprofessional education works and in what circumstances this takes place.

The assessment given is of interprofessional education evaluation in health and social care in the United Kingdom as it is presently reported. The nature of the Review relates to a particular group of reviewers, their professional, and research backgrounds, at this particular time. Another review, at another time, by other reviewers, would focus on other studies and highlight different issues.

The examples reported include much that others may wish to replicate, but there are methodological gaps that can only be filled by reference to evaluations in other countries, notably the United States. We have therefore erred on the side of caution in drawing implications from UK sources alone.

This Review forms part of a continuing programme of work to establish the evidence base for the effectiveness of interprofessional education world-wide as a means to cultivate better collaboration between health and social care professions and so to improve the quality of care for patients and clients. A review under the auspices of the Cochrane Collaboration has already been completed (and will be repeated periodically). This was based upon systematic searches of databases to identify evaluations satisfying strict quantitative criteria (Barr et al 1999a; Zwarenstein et al 1999) (see Appendix 3). At the time of writing, a Parallel Review is close to completion. This takes into account a wider range of research methodologies (Barr et al 1999b) (see Appendix 4).

UK evaluations of interprofessional education comprise four per cent of the total of those found so far in the Medline[1] search that meet methodological criteria for inclusion in the Parallel Review. We have taken these into account in selecting examples to include in this Review, whilst also drawing upon our collective knowledge of the wider UK literature.

We have also taken into account the diverse range of terms used to describe occasions when professions learn together (e.g. Leathard, 1994 and others), whilst opting for the use of "interprofessional education" so far as practicable and as defined by CAIPE (see page 3).

As members of JET we seek to maintain the best traditions of interprofessional teamwork. Accordingly, our names are cited in alphabetical order to represent the equality of effort in this Review.

The Interprofessional Education Joint Evaluation Team (JET) comprises:

Hugh Barr, Professor of Interprofessional Education, Centre for Community Care and Primary Health, University of Westminster;

Della Freeth, Senior Lecturer: Research, St Bartholomew School of Nursing and Midwifery, City University;

Marilyn Hammick, Director of Quality, School of Health Care, Oxford Brookes University;

Ivan Koppel, General Practitioner and Principal Lecturer, Centre for Community Care and Primary Health, University of Westminster;

Scott Reeves, Researcher and Associate Lecturer, St Bartholomew School of Nursing and Midwifery, City University.

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[1] Other databases are now being checked.

3 The Proposition

Reports from government departments, parliamentary committees and official inquiries have called repeatedly for closer collaboration to: -

- Improve the NHS as a whole (DHSS 1972a&b, 1974, 1979; Ministry of Health, 1956; Secretary of State for Health, 1996b&c, 1997; Secretaries of State, 1989b).
- Co-ordinate health and social care (Department of Health, 1990a, 1997, 1998a,b&d, 1990a; DHSS, 1973; 1979; 1981a, 19981b, 1982, 1983, 1984 1986 and 1987; House of Commons Select Committee on Social Services, 1985, 1987; House of Commons Select Committee on Health, 1999; Local Authority Association and National Association of Health Authorities, 1986; NHS and Community Care Act 1990).
- Implementing policies for primary health (Audit Commission, 1992c; DHSS, 1981c, 1984; Department of Health, 1998b; Secretary of State for Health 1996a, Standing Medical Advisory Committee, 1963; Standing Medical and Nursing & Midwifery Advisory Committees, 1996).
- Implement policies for community care (Audit Commission, 1986, 1992a, 1992b; Cumberledge, 1986; Department of Health, 1990b; 1997; DHSS 1981a&b; DHSS Inspectorate, 1991; Personal Social Service Council/National Association of Health Authorities, 1978, Secretaries of State 1989a).
- Promote health education (Department of Health, 1998c; Secretaries of State 1987; Secretary of State for Health 1992, 1993).
- Protect children (Beckford Report, 1988; Butler Sloss, 1988; Colwell Report, 1974; Department of Health, 1974, 1988, 1991a&b, 1995).
- Integrate child health (DHSS 1976, Home Office et al 1991).
- Co-ordinate plans for children with special needs (Department of Education and Science, 1978).
- Promote better mental health care (Department of Health, 1991c, 1994; DHSS 1971).
- Care for people with learning disabilities (DHSS, 1979).
- Mend marriages (Home Office/DHSS, 1979).

Many of these reports invoke "shared learning" to cultivate collaboration, although they are invariably silent about the means by which this will be achieved. Whilst the burgeoning literature on interprofessional education in health and social care has not yet generated an overarching case, it does advance mutually reinforcing arguments.

3.1 Interprofessional education

We are told that interprofessional education:

- Enhances motivation to collaborate by enabling participants to have productive learning relationships that give rise to expectations that relations in practice with the same or other professions will be equally productive (McMichael & Gilloran, 1984; McMichael et al 1984a&b; Carpenter, 1995a&b; Carpenter & Hewstone, 1996). Exponents of this argument invoke contact theory. This theory holds that people like those who are rewarding to them (Berkowitz, 1975; Tajfel, 1981).

Efforts are therefore made to optimise opportunities for productive interaction between the professions. Positive feedback from participants about the learning experience is often taken to imply that motivation for collaborative practice has been enhanced. Whether positive relations with fellow students are transferred subsequently to other members of that profession is harder to establish, and to members of other professions even harder.

- Changes attitudes and perceptions by enabling participants to learn from and about one another in ways that counter prejudice and negative stereotypes in the belief that this will help to overcome barriers to collaboration (McMichael & Gilloran, 1984; McMichael et al 1984a&b). This proposition, like the first, puts a premium on interactive learning. Tools developed for evaluation measure attitudes or perceptions towards one another and sometimes towards patients or clients and service delivery. Having the `right` attitudes may not, however, be sufficient.
- Cultivates interpersonal, group and organisational relations by creating opportunities for the participant professions to become more aware of their relationships with other individuals, groups and organisations, through simulation. This proposition emphasises experiential learning and calls upon psychoanalytic theory (Halton, 1994; Obholzer 1994a&b; Stokes, 1994). Neither process nor outcome has yet been evaluated systematically. Transfer of learning into the real world of work is unproven.
- Establishes common value and knowledge bases by providing curricula that are equally applicable to each of the participant professions and introduce common concepts, values, knowledge, perspectives, and language. These typically include foundations in health and sciences, health and social policy, and the organisation and delivery of services (Tope, 1996). They are thought to provide a frame of reference for collaborative practice as well as facilitating better communication.

Arguments for common curricula are reinforced by workforce policies that call for skill mix and more flexible deployment of personnel (Schofield, 1995), but weakened by the case for specialist studies that distinguish each profession and its specialist branches. Whilst the intention is to counter over-specialisation, the effect may be to make it even more difficult to accommodate the explosion of specialist knowledge within the curriculum and to ensure that it is focused for the benefit of patients and clients. The generic/specialist debate refuses to go away.

The problem is eased when interprofessional curricula are reframed into common and comparative components. This distinguishes between that which all the participant professions need to learn and that which each profession needs to learn about the other(s) to inform intelligent collaboration (Barr, 1994a). Viewed thus, comparative studies introduce specialist studies into curricula shared with other professions insofar as that is helpful in cultivating collaboration with those others. They may be provided, for example, in relation to work with same patient or client group. They are derived from and linked with specialist studies, not a substitute for them.

The proposition that interprofessional education reinforces competence, by defining outcomes in terms of competencies required for collaboration, is the most recent and least developed. It asserts that collaborative behaviour is a skilled activity that calls for more than good intentions, harmonious relations, and common understanding. It builds upon the redefinition of learning outcomes for most of the health and social care professions in competency-based terms (Barr, 1998). Its arrival is too recent to

be reflected so far in ways in which interprofessional education is evaluated. It is vulnerable to criticism from those who question competency-based professional education (Barr, 1994b; Hodkinson, 1992; Kelly et al 1994; Messick, 1992; Moonie, 1992; Wolf & Mitchell, 1992) and must reconcile different perceptions of such education by different professions.

3.2 Learning Methods

Interprofessional education gains value, according to its exponents, when interactive methods are introduced that involve participants in shared tasks and enable them to learn not merely with but also from and about one another (Barr, 1994a). To that end, a wide range of interactive methods have been tried (Barr, 1996). These include:

Received Learning, e.g. lectures and other didactic teaching.

Exchange-based learning, e.g. case discussion (Woodhouse & Pengelly, 1992).

Observation-based learning (Likierman, 1997), e.g. joint home visits (Jones, 1986).

Action-based learning, e.g. problem-based learning (Barrows & Tamblin, 1980), collaborative enquiry (Glennie & Cosier, 1994; Reason, 1994).

Simulation-based learning, e.g. games and role-plays (Jacques, 1986: McMichael & Gilloran, 1984), experiential groups (Stokes, 1992).

Practice-based learning, e.g. placements and work-based assignments (Scrine, 1989; Walstrom & Sanden, 1998).

Arguably, the potency of interprofessional education lies not in the application of any one of these methods, but in their combined impact in the hands of teachers with the experience, sensitivity, and skill to ring the changes.

3.3 Types of interprofessional education

Interprofessional education takes many guises. It would be most surprising if different types were found to be equally effective (or ineffective) in cultivating collaboration. There is therefore a need to distinguish between types of interprofessional education in framing research questions and to identify variables to be isolated. Those such as form, duration, location, composition, and content could prove to be significant. The point reached along the continuum of professional education at which interprofessional education is introduced, pre-qualifying, post-qualifying or part of continuing professional development, may prove to be especially significant (Barr 1996; Hammick, 1998).

Interprofessional studies may comprise all or part of a programme, which may be full-time or part-time, face-to-face or at distance. It may be work-based, university-based or independent of either, last an hour or two or run for years.

Interprofessional content during pre-qualifying education typically takes the form of foundation studies in health and social sciences (Tope, 1996). Teachers must rely heavily upon simulation-based learning, although interprofessional practice-based assignments may be introduced during placements. Barr (1996) draws attention to the need for caution regarding expectations of interprofessional learning at the pre-qualifying stage, given the inexperience of the participants, the need to meet profession specific requirements and the limited time typically found for shared elements of learning. Realistic aims and objectives may be prophylactic, i.e. preventing the formation of negative attitudes towards other professions, and

preparatory, i.e. laying foundations for subsequent learning with other professions in practice and continuing education.

Post-qualifying programmes may be less constrained. All rather than part of the programme may be shared. The pattern of study is typically part-time enabling participants to relate theory and practice. Content typically includes updating knowledge, strengthening academic foundations, introducing new practice methods and preparing students for new roles and career progression (Barr, 1996; Storrie, 1992). Part-time programmes, as many are, enable participants to draw upon work experience and to apply their interprofessional learning concurrently. As senior practitioners, participants have experience to exchange, including interprofessional experience, and may be in positions where they can influence changes in practice. The diverse backgrounds from whence participants are drawn may also enrich comparative learning about collaboration. Yet constraints remain. Tutors cannot pay equal attention to diverse work settings, while participants are left to apply their interprofessional learning in their respective workplaces where they may encounter resistance. Improvements in collaboration, if and when achieved, may be varied, diffuse and hard to measure.

Interprofessional education in the workplace can sometimes involve participants from the same team or unit. This can be difficult to arrange, when services must be maintained, but does enable them to share objectives and to work together to effect immediate change or improvement that can readily be observed by all. Transferability of such learning to other work settings subsequently is, however, hard to establish and arguably beyond the scope of the exercise.

Each of these types of interprofessional education may cultivate collaboration in different ways. Whether they do so, and under what conditions, is for research to determine.

3.4 Re-framing the research question

The hypothesis that interprofessional education cultivates collaboration has been stated so often that it is in danger of being treated as a self-evident truth. We show that the question related to this hypothesis is more complex than it may at first appear.

It is no longer: -

> Does interprofessional education cultivate collaborative practice?

But: -

> In what ways can interprofessional education contribute to improvements in collaboration between health and social care professions and in what circumstances?

Framed thus, the question allows for a range of outcomes in relation to different types of interprofessional education with different content, learning methods, theoretical perspectives and practice contexts. This leaves on one side another question, namely the extent to which uni-professional education can cultivate interprofessional collaboration. That question lies beyond the scope of this Review. With one exception (Whittington et al 1993), it has to our knowledge been neglected in the literature. Yet its importance is self-evident given that most pre-qualifying and much post-qualifying education is uniprofessional.

4 The Framework

This section offers a three dimensional frame of reference for the evaluation of interprofessional education. The first is a classification of evaluative methodologies employed. The second is a classification of educational outcomes. The third is a classification of interprofessional education itself.

4.1 Classifying Methodology

As required, the Cochrane Review (Barr et al 1999a; Zwarenstein et al 1999) was restricted to evaluations that employed one of three quantitative methodologies (See Appendix 3). Based upon our collective knowledge of the field, we were concerned that this restrictive approach excluded a number of insightful and informative evaluations of interprofessional education. We decided therefore (in the Parallel Review) to expand our methodological inclusion criteria to incorporate all quantitative, qualitative and multi-method approaches to the evaluation of interprofessional education. These three approaches have equal potential merit, but offer very different perspectives on the evaluation of interprofessional education.

We went on to classify all research designs in relation to these three broad methodological approaches as follows: -

- Action research studies.
- Studies involving both researcher and practitioner in the research process, with the researcher feeding findings back to practitioner ultimately to enhance their work.
- Before and after studies (with or without control groups).
- Measures applied before and after an intervention. Where studies use a control group, this second group (who do not receive the intervention) are compared with the 'intervention' group.
- Case studies.
- In-depth, usually qualitative, examination of one setting or 'case', occasionally making comparisons between a small number of cases.
- Interrupted time series studies.
- Measures applied at a number of stages before, during and after the intervention.
- Longitudinal studies.
- Measures taken over period of time after the intervention.
- Post-intervention studies.
- Measures applied after the intervention.
- Randomised control trials.
- Random allocation of 'subjects' to intervention and control groups, with before and after measures for both groups.

Most of the UK evaluations reported employ a multi-method approach and use a before and after study design.

4.2 Classifying Outcomes

Of the available classifications of education outcomes, Kirkpatrick (1967) best met

our needs. This typology distinguishes four levels of outcome: -

Level 1: learners' reactions.

Level 2: acquisition of knowledge, skills, and attitudes.

Level 3: changes in behaviour.

Level 4: changes in organisational practice.

For the purposes of our work, we have modified categories two and four and our working definitions are: -

Level 1: learners' reaction

These outcomes relate to participants' views of their learning experience and satisfaction with the programme.

Level 2a: modification of attitudes/perceptions

Outcomes here relate to changes in reciprocal attitudes or perceptions between participant groups, towards patients/clients and their condition, circumstances, care and treatment.

Level 2b: acquisition of knowledge/skills

For knowledge, this relates to the acquisition of concepts, procedures and principles of interprofessional collaboration. For skills, this relates to the acquisition of thinking/problem-solving, psychomotor and social skills linked to collaboration.

Level 3: Change in behaviour

This level covers behavioural change transferred from the learning environment to the workplace prompted by modifications in attitudes or perceptions, or the application of newly acquired knowledge/skills in practice.

Level 4a: Change in organisational practice

This relates to wider changes in the organisation/delivery of care, attributable to an education programme.

Level 4b: Benefits to patients/clients

This final level covers any improvements in the health and well being of patients/clients as a direct result of an education programme.

4.3 Classifying interprofessional education

For the third dimension of our framework, we have used modified variables identified by Barr (1996) in his preliminary attempt to formulate a typology of interprofessional education (see Section 3.3). Those variables are used as follows in this Review:

- Course Content
  - *Common* where programme participants learn the same content.
  - *Comparative* where participants learn about one another.
  - *Mixed* a combination of both common and comparative content.
- Learning methods
- Location, or where the programme is based, e.g. in the workplace or university.

- Duration, with this category sub-divided into three:
  - *Short-term:* programmes that last for up to one day.
  - *Medium-term:* programmes that last for more than one and up to seven days.
  - *Long-term:* programmes that last more than seven days.
- Stage
  - Undergraduate
  - Postgraduate
  - In-service or continuing professional development.

So far as practical, descriptions of the selected papers take these variables into account.

5 The Evidence

5.1 Previous Reviews: the Findings

Persuasive though arguments in favour of interprofessional education may be, evidence to substantiate them is elusive. Importantly, in the context of this Review, in 1995 Barr and Shaw found only 19 published evaluations of interprofessional education in health and social care in the UK to report. It was against this backdrop that four of us initiated, with colleagues[2], a Cochrane Review of interprofessional education in health and social care. This Group completed a systematic search of databases for evaluations of interprofessional education that employed one of three quantitative methods related to changes in the organisation of services or the quality of patient care. None were found. Disappointing though that was, it at least established a baseline upon which to build the evaluation interprofessional education in terms acceptable to the Cochrane Collaboration.

It was in anticipation of this outcome, and mindful of the importance of process-oriented and participative evaluations that the Cochrane methodology undervalues, that JET embarked upon the Parallel Review. This encompasses qualitative and a wider range of quantitative evaluations and a continuum of outcomes. Some examples used in this Review have been extracted from that body of work, augmented by others already known to us or brought to our attention by CAIPE members.

5.2 This Review: the Literature

Papers included in this Review came from published sources and the grey literature. They were selected to cover the widest available range of evaluative methodologies applied to interprofessional education in the UK. The papers also had to fulfil two criteria, namely that the education initiative was *interprofessional*, and the initiative, primarily, was of a formally organised nature.

We looked, where possible, for studies that evaluated educational process as well as learning outcome. Our selection was guided by the need not to repeat work already in

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[2] Membership then being Hugh Barr, Marilyn Hammick, Ivan Koppel and Scott Reeves with Jo Atkins and Merrick Zwarenstein.

the public domain and yet not to exclude from this Review seminal works of importance, historically, because of their contribution to the body of knowledge of interprofessional education. More than one paper employing the same methodology is included where they refer to different types of interprofessional education or report different outcomes. Other selection criteria, based on the quality of the reports are discussed below.

We excluded reports where numbers attending the interprofessional education intervention was small (less than 15), especially if quantitative methodology was used, on the basis that any conclusions were not likely to be sound. This did not invalidate use of reports with small numbers *per se*. Where the study design was congruent with the intent of providing an illuminate evaluation, for example, in a case study, the paper was included. A major group of excluded reports were those where the evaluative methodology, or at least its reporting, was inadequate, making it difficult to link the methodology to the outcomes. Where response rates were less than 50% we judged that any quantitative conclusions reached were unsound. We also excluded papers with unclear methodology and methods, given the difficulty of evaluating results and conclusions in the absence of full information about study design. It is important to stress that the papers reviewed (see Appendix 5) are neither exemplars of best research, nor of best educational practice, but are a reflection of the state of the art.

Applying our selection criteria left us with 19 papers, from 40 originally considered. Some of these report on more than one initiative (e.g. Hutt, McMichael), in others the same initiative is reported in more than one publication (e.g. Carpenter & Hewstone). Evaluations reported by Barr & Shaw (1995) have been excluded on the grounds that summaries of them are readily accessible, except four whose methodology is especially pertinent to the following critique. Coincidentally, both reviews present 19 evaluations, but on this occasion our work has been informed by a systematic search of Medline and also by taking into account more recent research reports. The two reviews also differ in emphasis. Barr & Shaw paid equal attention to the programmes and their evaluation. This Review focuses more upon the research methodologies employed on the assumption that the form and content of interprofessional education is better understood than five years ago. The focus here is on the reported outcomes of interprofessional education within a three-dimensional theoretical framework.

6 The Examples

The 19 examples are summarised as follows.

Hasler J & Klinger M (1976) describe the quantitative evaluation of a four-day residential course for general practitioner (GP) trainees and student health visitors (HV). The course aimed to improve interprofessional attitudes and increase understanding of each other's professional roles, using seminar-based discussions around the issues of role clarification, enhancing communication, and improving future collaborative practice. The course was initially piloted with 17 health visiting students and four general practice trainees. Pilot evaluation methods were not described although it was claimed that participants enjoyed the course and that all interprofessional learning objectives had been met. The main course, a year later, had a more equal mix of participant groups: 11 health visiting students and 10 GP trainees. Its evaluation centred around: pre-course information from participants' teaching

practices on levels of informal and formal interprofessional contact; pre and post course questionnaires to assess participant reaction to the course and areas of learning; pre and post course essays to assess evidence of joint planning of patient care.

Results indicated relatively low levels of contact between these two groups before the educational intervention, but there are no follow-up data of levels of interaction after the course. The essay data reveal a modest increase in their essay scores for both groups achieved after the course. Questionnaire responses indicated over half of the students felt they had learned more about each other's role. However, although participants considered they had a better awareness of communication problems between the two groups, they did not feel that communication levels had improved significantly after the course.

Brooks, Hendy & Parsonage (1981) provided a one day course for 27 student district nurses (DN), 24 student health visitors (HV) and 24 trainee general practitioners (GP) which aimed to facilitate learning about:

- the need for teamwork;
- the concept of the primary care team;
- leadership and changing roles in such a team;
- interaction between professionals;
- obstacles in such a team;
- professional identities;
- stereotypes or self-interests.

The learning format was mainly discussions on the roles and factors influencing team function, with minimal didactic input. The evaluation methods were a questionnaire, observation, and informal feedback. Responses were obtained from 21 DNs, 23 HVs and 15 GPs.

Overall, most of the students found the sessions enjoyable. The professions varied in terms of the amount of improvement in their knowledge of other professions and the challenges teams face. Measured on the scale of one to five, overall the GPs scored 3.3, HVs scored 3.2 and DNs showed a more modest gain of 2.5. The HVs were more positive about the concept of a team than the other professionals. All participants scored higher on the appreciation of how they would use this knowledge in the future compared with knowledge improvement. In other words, their underlying attitudes positively changed more than their perceived knowledge.

McMichael & Gilloran (1984) report the first evaluation of college-based interprofessional education in the UK at Moray House in Edinburgh (see also McMichael, Irvine and Gilloran, 1984: McMichael, Molleson and Gilloran, 1984). Teachers there were exercised about the incomprehension and even hostility that characterised relations between community work, primary school teaching, and social work students during their qualifying courses. They were concerned that differences observed between the three groups when they entered College seemingly increased as their courses progressed. What could the College do to modify such negative attitudes? Three projects were tried with different student groups. The first offered alternative practice placements in the work setting of one of the other professions. The second was a common course in social psychology (for 146 students) that stimulated interaction by exposing attitudes expressed in replies to questionnaires,

debates abut ethical issues, games and role play. The third comprised a series of workshops (for 177 students) that included discussions based upon a video of communication problems and conflict management, plus a case study, a work prioritising exercise and a do-it-yourself collaborative project. All three projects were grounded in contact theory, which holds that people like others who are rewarding to them (Berkowitz, 1975; Tajfel, 1981). If, thought the teachers, students of one profession came to enjoy positive relations with those from the other two liking might follow, mutual approval might reinforce self-esteem and the benefits carry over into relations with other members of those professions after qualification.

The second and third projects were evaluated using before and after questionnaires. Findings following the first project revealed that student teachers were now better disposed towards student community workers and social workers, but this was not reciprocated. The attitudes of student community workers and social workers towards student teachers tended to become more negative. Reflecting on the project, the teachers concluded that the Group had been too large and unevenly balanced, the time had been too short (an hour and a half per week over two terms) whilst too little had been done to ensure that all students joined in the interaction. Evaluation of the third project produced similar results, despite modifications in the light of experience. Student community workers and social workers remained critical of the primary teachers, but reportedly more aware of some of the teachers' frustrations. The primary teachers became more aware of ways in which the social workers might help them in their work, but this did not extend to the community workers.

Bolden & Lewis, (1990) ran a one week residential interprofessional education (interprofessional education) course, facilitated by a GP and Practice Nurse (PN) educationists, for PNs and GP trainers (12 and 26 respectively). One overall course objective (from 10) related to teamwork and team problem solving, but groups of participants also identified their own aims and objectives. These were mainly educational, but also focused on interpersonal skills and self-awareness. There was a mixture of structured and group activities and topics covered included doctor-nurse relationships, awareness of one' relationships with others and concepts of teamwork.

Evaluation consisted of measurement of levels of knowledge and attitudes before and after the course. Changes in educational knowledge were considerable; for PNs, 11.9. to 26.6 (maximum of 34), and for GPs 17.6 to 29.5. Changes in attitude were measured through 40 statements on interprofessional issues, personal skills, and attitudes. The results showed changes with respect to professional status and roles, and teamwork issues. Observed behavioural changes included a reduction in the dominance of the GPs as the course progressed towards more equal contributions from both professional groups to discussions.

Spratley (1990) reports a multi-method research project, which examined a series of three-day residential and one-day non-residential education workshops for primary health care, teams (PHCTs). Key objectives for the workshops were to develop interprofessional teamwork and communication in the planning of disease prevention and health promotion. A total of 18 workshops, with 521 professionals, including 146 GPs, 98 PNs, 75 HVs and 46 district/community nurses (DCNs), were organised around various problem-solving seminars and the occasional presentation. They were evaluated over 12 months by:

- participant observation of the planning and organisation;

- documentary analysis;
- pre and post workshop questionnaires;
- follow-up interviews with participants;
- post-workshop participation observation in de-briefing sessions.

Follow-up site visits to assess the impact of the workshop training on PHCTs practice were also made.

The workshops were highly valued by the participants who felt that their communication and team working skills had been enhanced and that the workshops provided a useful opportunity for teams to develop and plan strategies for disease prevention and health promotion. All participants achieved the short-term learning objectives related to improved communication and joint planning skills and longer-term objectives were also met. Site visit data revealed that the PCHTs had begun to critically review their current practice and were in the process of developing methods of enhancing communication within the team. Improved communication strategies were also being developed between PCHTs and local health/social care agencies, community groups and clients/users.

Ashton (1992) used a quasi-experimental design to compare retrospectively occupational therapists, physiotherapists, and speech therapists (the study group) attending a continuing professional development course. This lasted one day a fortnight for one year with a similar non-attending control group (N=98). The study included all those attending between 1980 and 1986 (N=97).

In addition to aims relating to the continuing professional development and introduction of evaluation of the participants` work, the course aimed to promote 'awareness and sensitivity of each profession to the other professions involved in the patient care. More specifically, two of the objectives expected students to develop interprofessional education and demonstrate awareness of issues in interprofessional relationships.

Evaluation of the course was by questionnaire which sought basic demographic information, data on professional activities [based on a Likert scale of 1-5], self-assessment of skills, assessment of the course and future continuing education needs. Responses from 62 (81%) of the therapists attending and 67 (68%) of the controls were analysed using arithmetic means, tests of variance, and chi-square and t-tests .

At the end of the course the study group was significantly more involved in research (sign. 0.00) and administrative and management tasks (sign 0.03). These students also identified the following skills to be less of a problem than did the control group: identifying needs of staff members; patients and carers problem identification; research skills and developing interprofessional education. There was no significant change of perceived impact of the course on interprofessional relationships. The research was not designed to gather any direct evidence of impact of the course on patient care. When evaluating the course in relationship to usefulness to gaining new skills – the following three skills came top: research, interprofessional relationship and interprofessional education. A separate study was made of 21 therapists attending post-registration interprofessional education course at certificate level. Most of the modules were positively evaluated for their usefulness.

Spencer, Pearson, James & Southern (1993) report a multi-method study to assess the impact of a series of two one-day training courses for primary health care teams

(PHCTs). Adopting a continuous quality improvement approach, the courses were designed to provide PHCTs with an understanding of the use of multidisciplinary audit and provide encouragement in implementing this form of audit in their practice. Five PHCTs participated in the both training days, with participants from medicine, nursing and social work. The course was seminar-based with each PHCT undertaking a variety of problem-solving and brainstorming exercises. The training was evaluated over a 12-month period by the following methods:

- pre and post course questionnaires to assess attitudes to audit and team function;
- lists of problems generated by each team and their responses about the project and ideas on audit;
- site visits undertaken after the training to assess the progress of each PHCT with multidisciplinary audit.

The findings revealed both behavioural and practice changes within the PHCTs. All teams had identified a range of topics for review/audit and had undertaken initial work in this area. Three of the five PHCTs had gone on to produce an audit plan and drawn up a 'team manifesto' (to improve the process of teamwork in their audit cycles). The project also found that teams had experienced a range of problems while undertaking their audit work. In particular, lack of time, lack of understanding of audit and poor interprofessional communication within teams had acted as barriers in their work with multidisciplinary audit.

Brown (1993, 1996) reports an evaluation into the effectiveness of developing teamwork in PHCTs using either workshops alone or workshops with a follow-up visit. The participants, multiprofessional teams of practitioners (GPs, Practice Nurses, District Nurses, Community Psychiatric Nurses and practice administrative staff), were purposively drawn from nine Practices, with controls from another nine Practices. In summary, the workshop aimed to establish working relationships between team members and to initiate common objective setting and action planning. The follow-up visit aimed to maintain any enthusiasm generated by the workshop.

The evaluation employed pre and post intervention questionnaires with initial questionnaire responses from 65 participants and 58 controls, and follow-up responses from 40 participants and 49 controls. The findings report positive changes in perceptions of who belonged to the PHCT, participants understanding of their colleagues' roles and the value of meetings. Assessments of teamwork within PHCTs and job satisfaction were rated more highly by the participants than controls. In general, the follow-up visit was found to be useful with slightly more respondents from practices with no workshop participation identifying a need for support in the development of teamwork activities.

Overall, the author concludes that time set aside for team building work, either in workshops or through facilitated visits, both of which provide protected time for consideration and reflection is useful.

Nash & Hoy (1993) evaluated three-day residential workshops on terminal care in the community, organised by a nurse and a palliative care physician, for GP and District Nurse (DN) practice-pairs. The workshop content addressed issues related to difficult symptoms, breaking bad news, counselling and communication, grief and loss and coping but also varied according to individual group needs. Adult and experiential educational methods used included small and large group discussion, video, and case

history analysis. Formative end-of-workshop evaluations were done routinely.

The evaluation is reported here of five such workshops retrospectively attended by 47 participant pairs. Anonymised questionnaires collected demographic data and information on the effects of the workshops on practice and of attending with a professional partner. General practitioner respondents (77%) had almost all completed a vocational training scheme and of the DNs 94% were trained. There was a varied pattern of responses on the effectiveness of the workshops on practice but attending together was considered either helpful or very helpful by all but two respondents. Benefits were considered to be positive shifts in understanding of the *other* as a person, by the DNs, and a broadening of outlook and easier access, by the GPs.

Hutt (1994) analysed the outcomes of three-day asthma and diabetes courses for primary health care professionals (Practice Nurses, GPs, managers and receptionists). Evaluation methods were:

questionnaires to matched groups of attendees and non-attendees (controls) before and 6 months after the course to collect demographic data, practice profiles and learning needs;

semi-structured interviews on asthma care and learning needs with a sample from both professionals groups.

Response rates varied between 100% and 47%. Pre-course results for the asthma course showed no significant differences between groups on various indicators, such as having asthma clinics, specialist nurse, asthma registers, protocol, performing audit, teaching and checking inhaler techniques, self-management plan and having record of smoking. Those who attended scored significantly higher on their perceived learning needs but this is likely to be related to choosing to attend to improve their knowledge/ skills/ practice organisation. Post-course results show that the attendees improved on all indicators but comparisons are limited by the low response rate from the control group.

Pre-course results for the diabetes course show no overall difference between the groups but attendees were more likely to have registers and protocols and non-attendees were more likely to audit the care, have specialist nurses and have clinics. There were no obvious differences in the learning needs of the two groups, i.e. no clear indicator of the motivation for attendance. Post-course results show that the attendees showed a significant increase on one indicator, more practices reported having nurses and more of them shared involvement in care. Overall, changes resulting from attending the courses were small. It is likely that this is related to the good standard of care already in place before the educational intervention.

Thomas (1994) reports on the 'Liverpool Intervention', a two stage (1989-91 and 1991-94), a project that aimed to facilitate the development of Primary Health Care. In Stage 1 one nurse and one GP facilitated the development of general practice across the City, aiming for sustainable change. Their priorities were to:

- end the isolation of GPs;
- promote the employment of Practice Nurses;
- provide training and support;
- promote the concepts of health;

- reduce the preoccupation of health workers with disease and isolated action.

The multifaceted intervention adopted an opportunistic, problem-solving approach, listening to stakeholders, collating and disseminating their perspectives in order to work towards consensus for action. Activities included providing bulletins, facilitating multidisciplinary forums and workshops, presenting models of good practice, road-shows, residential team-building activities, promoting consensus statements and coalitions, and encouraging networking and interagency collaboration.

Stage 2 with a multi-disciplinary facilitation team (GP, Health Visitor, Practice Nurse, Practice Manager and administrative support) concentrated on one geographical area of the City where General Practice was thought to be particularly underdeveloped. Their priorities were to develop:

- basic teamwork and teamwork skills;
- skills to learn from each other in daily work;
- models of collaboration and of how to produce consensus.

The activities aimed to make the process of facilitation more visible with the aim of achieving outcomes related to teamwork development, effective service delivery, and multidisciplinary education.

In keeping with the action research perspective of the project its evaluation was contemporaneous with its development. A diversity of evaluation methods and indicators were used to provide a breadth of evidence given that different interventions were employed and the many stakeholders had different perspectives and needs. Qualitative evidence of success is given through comments from the project participant practitioners. Quantitative comparative judgements are made between the targeted geographical area, the rest of the City and a London Family Health Services Authority (FHSA) that shared several characteristics with the target area, mainly through changes in immunisation and cervical cytology rates.

At the end of the project the facilitation team was disbanded and four Local Multi-disciplinary Facilitation Teams (LMFTs) of 20 local practitioners for five hours per week. The existence of the LMFTs is 'the most significant piece of evidence of the success of the PHC Facilitation Project' Thomas (1994, p19). An action researcher was appointed to facilitate the evaluation of the LMFTs, using an evaluation framework developed in collaboration with local stakeholders.

Hewstone, Carpenter, Franklyn-Stokes & Routh D (1994), Carpenter & Hewstone (1996) and Carpenter J (1995a&b) report the evaluation of an extended series of shared learning opportunities at the University of Bristol between 1983 and 1991. All the papers describe study days involving either final year medical students with final year undergraduate nurses or final year medical students with social work students in their third or fifth term. Although there was some element of choice in which parts of the shared learning programme students 'signed up' for, on most occasions all were expected to participate in some aspect of the programme which comprised a mixture of full day and half day sessions. Not all students felt positive about the shared learning before it began.

The shared learning programme and its evaluation were set in the conceptual frameworks of 'the contact hypothesis' and theories of inter-group relations.

The learning aims were to:

- examine similarities and differences in the attitudes and skills of members of different professions;
- acquire knowledge of professionals' respective roles and duties;
- explore methods of working together co-operatively and effectively.

The learning experiences were structured to promote successful joint learning in a co-operative atmosphere with students working in interprofessional pairs and small groups. Session leaders were asked to draw attention to both professional similarities and differences. The evaluation focused on stereotyping behaviours and attitudes towards:

- the shared learning experience;
- ratings of ingroup and outgroup status;
- abilities, knowledge, attitudes and behaviour.

Data collection by anonymised questionnaires, mainly using Likert-type scales, with some opportunity for comment, was undertaken at uniprofessional briefing sessions prior to the shared learning opportunity and again at the end of the shared learning. A self-generated code permitted the linkage of pre-tests with post-tests. Collectively, the four papers report responses from 74 medical students with 67 social work students and 23 medical students with 16 undergraduate nursing students. Analysis of variance (ANOVA) tests were employed to explore and interpret the quantitative data. Some evidence was found to support positive changes in attitude at the end of the programme, although the authors acknowledged that these might not persist. In addition there was evidence of mutual inter-group differentiation, that is, when each profession's particular and valued contribution to specific circumstances is acknowledged by all groups.

Poulton (1995) studied measures of team functioning in 39 PHCTs before and 3 months after attending HEA workshops. Using a self-generated questionnaire, based on a Team Climate Inventory, a number of aspects of team functioning, taking into account factors such as size and heterogeneity of team membership and process of teamwork (e.g. team participation), were surveyed. On five of these there was evidence of significant improvement: namely, understanding of the knowledge and experience required for individual team roles ($p = <0.001$); task orientation to promote quality of care ($p = <0.001$); and better team participation ($p = <0.001$). In addition, teams showed an increase in their clarity, ability to share, valuing of team objectives, and in the appropriate use of team members' skills. No change was documented on support for innovation and valuing individual roles.

Participants also evaluated the workshops through pre- and post questionnaires. They saw the workshops as having contributed positively to improving team function, in aspects such as communication, spirit and efficiency; developing new ways of working and improving quality of care. The limitation of this part of the study is the lack of a control group. No impact on patient care was documented.

Greene, Cavell & Jackson (1996) report their evaluation of three years of joint therapeutic teaching sessions (2.5 hrs) for selected final year pharmacy and second MB medical students. Student pairs (4-5 for each session) are asked to present their findings on clerking and compilation of a medication profile for as assigned patient to

a plenary session for all students.

The paper reports the formative evaluation, by questionnaire, of nine such sessions, from 73 students (34 BPharm and 39 MBBS). Data were collected about the organisation of the sessions and the experience of interprofessional learning. Overall reaction is reported as positive from all students and there was agreement (55%) or strong agreement (40%) on the usefulness of learning with students from other disciplines. Problems identified by the students were of a practical nature and most favoured more sessions of a similar type. From the formal evaluation the researchers observed that the students appeared happy to learn from each other and that there was little nascent professional rivalry.

Hughes & Lucas (1997) presented an evaluation of problem-based learning (PBL) in three multiprofessional education (MPE) modules for undergraduate students from physiotherapy, prosthetics/orthotics and diagnostic radiography. The modules, People in Society; Developing Professional Co-operation and Interprofessional Clinical Practice, formed part of the students' undergraduate curriculum from year one to year three and share the overall aim of developing team working and reflection skills. Each module had a four-week duration and was taught in small interprofessional student groups.

Evaluation data for two cohorts are presented: 1994/95 with responses from 68 students and 1995/96 with responses from 106 students. The evaluation design is unclear, however from the data presented it appears that post-intervention student questionnaires were used to assess the impact of the module, through the following specific aspects of the module:

- the extent to which students met their MPE objectives;
- the extent to which students met their PBL objectives;
- amount of self-directed PBL students undertook;
- number of PBL learning objectives students generated;
- tutor performance;
- quality of working problems generated.

The findings reveal that the vast majority of students, in both cohorts, felt their MPE and PBL objectives had been fully met. Overall there were generally positive outcomes in terms of the student learning experience during the module. However, the issue of group size was a factor in the quality of the student interaction with the 1995/96 cohort (with larger PBL student groups) scoring slightly lower in terms of meeting their MPE and PBL objectives compared with the 1994/95 cohort, with smaller PBL student groups.

Pryce & Reeves (1997) present findings from a multi-method research project that focused on a two week community-based module for first year undergraduate medical, dental and nursing students. The module's overall aim was to provide students with experience of the community and to enhance their team working skills. The project evaluated the micro and macro educational processes through a case study approach. Qualitative data (e.g., pre/post module focus groups, individual interviews, and observations) were collected from the participants: 36 'interprofessional' students; 14 tutors, ten health care users. In addition, 30 students who did not undertake interprofessional education were interviewed to obtain comparative student

data. To assess the wider, macro issues connected with interprofessional education, six strategic gatekeepers were interviewed, including the Deans of a medical school and a nursing school and representatives from health professional bodies. Economic data and quantitative student satisfaction scores were collected for a formal cost-benefit analysis.

Findings from this study revealed that all informants attached a high value to interprofessional education, regarding it as essential to improve interprofessional communication, enhance co-operation and reduce professional rivalry/hostility. All the interprofessional students met the module's learning objectives and, generally, they enjoyed their interprofessional learning experience. However, the quality of their teamwork was affected by a number of difficulties, such as: time-tabling clashes and the perception that a community-based module represented 'low status' knowledge. In relation to teaching on the module, the data indicated that tutors did not pay attention to the processes of group work and this resulted in generally poor quality teamwork. Data gathered from the student control group indicated no significant discrepancies between their perceptions and attitudes of interprofessional education when compared directly with the student intervention group. The cost-benefit data indicated that the direct cost savings and the benefit changes for introducing interprofessional education in this particular case were both marginal.

Lacy (1998) reports the evaluation of the first four years experience (1992-96) of an interdisciplinary, one year, part-time course for practitioners concerned with meeting the needs of people with profound and multiple learning disabilities (PMLD). The course was a collaborative initiative between Birmingham University, Department of Education, and the British Institute of Learning Disabilities (BILD). All students followed the same curriculum but, to accommodate different levels of prior educational attainment, the assessment was at two levels, leading to the award of either a University of Birmingham Advanced Certificate of Education, or a BILD Certificate in Disability Studies. Practical assignments, at each level, involved participants' day-to-day work, and aimed to improve participants' collaboration with other people in their workplace. The course developers hoped that multidisciplinary groups, already working in the same place, would undertake the course together. The course steering committee, course material development teams and the group of session leaders and speakers were all multidisciplinary to address a perceived perception that the course was unidisciplinary (education).

The evaluation adopted an action research perspective, designed to improve the course iteratively, with the desired outcome of ultimately improving the lives of people with PMLD. The evaluation utilised a range of questionnaires with a variety of open and closed questions, routine institutional course evaluation, open-ended and semi-structured interviews, observations in some participants' workplaces, and a reflective journal.

A total of 109 participants, from 11 occupational groups, in four cohorts contributed to the evaluation. A high proportion (38%) was qualified teachers and this is attributed to the course emphasis on learning and development, and its location in a School of Education. Thirteen nurses and five therapists participated and 48 participants were categorised as paraprofessionals (classroom assistants, support workers, home managers and instructors). Just one qualified social worker joined the course, which was disappointing to the evaluator. Subsequent accreditation by the Central Council for Education and training in Social Work and targeted advertising

gave cause for optimism that numbers would increase. There were 18 cases of groups undertaking the course together, but only six groups contained representatives of more than one job category.

The non-teachers sometimes felt disadvantaged by their lack of prior knowledge and overawed by the number of teachers attending. Ten aspects of collaboration were built into the PMLD course: definitions of terms;

- the roles of different professionals;
- strategies for professional collaboration;
- joint planning;
- joint observation, assessment and recording;
- effective teamwork;
- communication between professionals;
- working together in meetings and case conferences;
- affecting change in organisations; and training for collaboration.

Participants in the 18 groups rated these for usefulness and relevance and all topics were positively viewed by over half the respondents. All 18 groups felt their teamwork had subsequently improved.

Thirty-two participants completed an open-ended questionnaire between them identifying 74 effects of the course on their practice. These were categorised into; increased communication, increased working together, and improved attitude to teamwork. Informal discussions identified increased confidence as a widespread gain from the course. However, the author comments:

'Many participants feel that although they do learn new skills and increase their understanding, much of what they discuss and do merely confirms what they have been doing naturally.'

Observations in workplaces, elicited by third party report, indicated increased collaboration initiated by colleagues who had attended the course. Participants who attended together valued the time for joint reflection and planning, but reported that it remained difficult to make opportunities for this in the workplace. Some participants reported an ability to make changes to their own practice but an inability to change the practice of colleagues.

A report from the **University of Derby (1998)** looks at the implementation and evaluation of a funded pilot project in which social work and occupational therapy undergraduate students shared some learning experiences throughout their three-year degree programme. Topics selected for the shared sessions were professional roles and models for understanding people in society.

An action research framework was used for the evaluation, involving students, and staff. Data collection was by self-selected student focus group interviews and staff, and an attitudinal student survey tool. Content analysis and descriptive statistics were used as analytical methods. The authors conclude that the aim of *shared* learning, as proposed by Barr (1998), was beginning to be achieved for the students and that the impact on staff was positive. Organisational difficulties are highlighted. Outwith the results of the reported empirical work the report comments that the students show a continuing interest in sharing sessions and an awareness of the overlap in the work of

the two professions.

Parsell, Spalding & Bligh (1998) report the evaluation of a two day pilot course entitled 'Foundation Course in Health Care: Learning to Work Together in the NHS'. Twenty-eight final year undergraduate degree students attended, four each from: occupational therapy, orthoptics, therapy radiography, nursing, physiotherapy, medicine and dentistry. The learning objectives were to:

- provide opportunities to debate issues relating to working in the NHS;
- explore attitudes and concerns towards each other as professional practitioners;
- relate more effectively to colleagues through an increased understanding and awareness of their roles and responsibilities;
- recognise the involvement and priorities of other members of a multiprofessional team.

The course was facilitated by experienced practitioners engaged in a variety of professional roles within the NHS. The key components of the course were: two keynote talks followed by whole group discussion; an exploration of professional roles, aided by a 'talking wall', conducted in small interprofessional groups; case-based tasks addressed first in unidisciplinary, then in multidisciplinary groups.

The evaluation was formative, collecting both qualitative and quantitative data, and concentrating on stakeholder questions and issues. The emphasis was on describing, exploring and testing stakeholders' and the programme's theory of action. The participants were self-selected and all contributed to the evaluation. Three questionnaires, each containing a mixture of open and closed questions, were completed before the course, at the end of the course, and six weeks after it had finished. Response rates at each stage were 100%. The post-course questionnaires revealed small changes in knowledge and attitude, concentrated upon items that had been addressed during the workshop and related to the less well-known professions. Respondents were very positive about the learning opportunity. The authors acknowledged that there is little evidence to suggest that the changes reported by students would impact on their subsequent professional practice.

The successful pilot generated plans to make similar learning opportunities available to a greater number and wider range of students, by including interprofessional learning opportunities in their curricula. The logistical difficulties of attaining this goal are briefly discussed.

7 The Overview

Ten of the 19 evaluations reported above involve primary health care practitioners. Participants in these studies vary from whole teams to smaller groups of staff with responsibility for specific aspects of care, e.g., care of clients with asthma and the terminally ill. One of the earliest studies (Hasler & Klinger 1976), and the later work of Bolden & Lewis (1990), focus on residential courses for primary care practitioners in training, whereas in the remainder the educational interventions can be described as types of continuing professional education (CPD). Ashton's (1992) work was also related to CPD for three different groups of therapists (occupational therapists, physiotherapists, and speech therapists). The majority of these interventions are short

(one day to one week) but Lacy (1998) and Ashton (1992) describe longer courses. By implication, all of these are for part-time learners.

There are also reports (seven in this Review) of the evaluation of interprofessional education within full-time undergraduate programmes, where pre-registration health and social practitioners from a number of different professions (two, three and seven professions, in this Review) learn together. The length of this experience varies from sessional, e.g., a study day, where students can choose to take the opportunity to learn with peers from other professions, to more extended learning experiences on compulsory modules. The only evaluation of an award based course for qualified practitioners reviewed here is Lacy's (1998) study of practitioners concerned with meeting the needs of people with profound and multiple learning disabilities.

All of Barr's (1996) five educational variables are represented in this Review. These are, of course, not mutually exclusive. The major differentiation seems to be related to either pre-qualifying full-time award courses, with interprofessional education experienced as a short (one day or less) session or as one or more module, or post-qualifying part-time experiences of interprofessional education, most usually of one week or less.

Almost all the learning methods previously described by Barr (1996) are utilised in the papers reviewed, often more than one. The intention is inevitably to encourage discussion, using participatory learning experiences. Some of these are creative, e.g., a 'talking wall', many are case-based and others provide participants with the opportunity to focus on work-related issues, e.g., action planning for PHCP teams that attend a course together. The interventions described by McMichael et al (1984 a,b,&c) and Pryce & Reeves (1997) are unique in their inclusion of practice-based learning for pre-registration students. The evaluations, through their focus on the achievement of the course learning outcomes or aims, are not sufficiently detailed to permit any judgements about the relative value of these different methods.

In all the papers reviewed here the goals of the educational intervention include and indeed, in some cases, have as their *raison d'êtr*e, an improvement in team working between the different professionals who deliver health and social care. In some cases this is detailed in the publication and incorporates aims that seek to change attitudes, reduce stereotyping, enhance communication, common objective setting, and action planning, and improve knowledge of professionals' respective roles. Less often the aim is implicit in the nature of the participant group, for example, the report by Lacy (1998) where practitioners concerned with meeting the needs of people with profound and multiple learning disabilities are brought together. In some cases the intervention aims to give the participants opportunity for developing personal skills and knowledge in specific areas, such as self-awareness, reflection and knowledge of the community, in the latter care for pre-registration undergraduates. Hammick (1998) highlights the role that a shared agenda and mission, which is often 'patient-care focused' and developed from national and, or local agendas for improvements in morbidity, mortality and quality of life play, has in courses for qualified staff. This is reflected in the papers reviewed here when participants and course aims are looked at together. Client groups such as those with asthma and diabetes, and national priorities such as the planning of disease prevention and health promotion, understanding of the use of multidisciplinary audit are amongst the topics. The courses for pre-registration students have more general aims as described above, with a clear focus on the development of interprofessional attitudes and knowledge of advantage to

practitioners entering the world of collaborative work.

7.1 Evaluations of interprofessional education in health and social care

Educational evaluation can be seen as a political act. In health and social care a number of bodies, e.g., purchasers, professional and awarding bodies, each with their own (competing) agendas, participate in monitoring the work of educational providers. However, it could be argued that most of this monitoring is concerned with learner achievement for an award, as opposed to changes in their practice behaviour and its subsequent impact on client care.

Unsurprisingly then, most of the evaluations reviewed here are criterion focused, developmental and process orientated (Thackwray, 1997). They are more concerned with stakeholder (usually student but also, indirectly, employer) satisfaction than meeting external requirements, self-evaluations, rather than independent, external evaluations are the norm and many seek to answer questions about improving the delivery of the intervention as well as those on the attainment of the aims. Overall, the evaluations reviewed here have a formative purpose, using action research (see, for example, the University of Derby, 1998), the case study approach and, most often, pre and post course surveys. Commonly, more than one data collection method is used and a number incorporate controls. Where the controls could be the non-participants, who elected not to attend the course, issues of bias are not always well explored by the researchers. An interesting use of control is in the study by Thomas (1994) who used a convenience sample for controls and in which quantifiable practice outcomes were utilised. The only example of a formal cost-benefit analysis is that by Pryce & Reeves (1997) who also assessed macro issues connected with interprofessional education, by involving strategic gatekeepers and collecting economic data.

Data collection tools are mainly questionnaires, with and without student essays, individual semi-structured and focus group interviews, and observation. Informal feedback is often incorporated into the study design and follow-up site visits and interviews also used. The investigators almost always sought basic demographic information and evidence related directly to the participants' experience of the course and often afterwards (up to 12 months in some cases). This included data on professional activities; self-assessment of skills; levels of knowledge; attitudes to team function; effects on practice and of attending with a professional partner; assessment of the course and future continuing education needs.

As indicated earlier, one criterion that determined inclusion in this Review was an appropriate match between the study design and participant numbers. However, in the interests of also reviewing across the width of interprofessional education evaluations, studies with relatively small samples were included. For example, Hasler & Klinger (1976) present work on 11 health visitor students and ten general practitioner (GP) trainees and Bolden & Lewis (1990) 12 practice nurses and 26 GP trainers, whilst Spratley (1990) report on 18 workshops involving 521 professionals. There is a similar range in sample size for studies using primary health care teams (PHCTs) with Spencer et al (1993) surveying five, while Poulton (1995) studied 39 teams. This range of sample sizes is as much a feature of interprofessional education per se as it is of research design with continuing professional development courses tending to have smaller samples than award bearing undergraduate programmes. For these, the sample sizes vary from 24 medical students and 67 social work students and 23 medical students with 16 undergraduate nursing students (Hewstone et al 1994;

Carpenter & Hewstone, 1996; Carpenter, 1995a&b) and 28 participants from occupational therapy, orthoptics, therapy radiography, nursing, physiotherapy, medicine and dentistry (Parsell et al 1998) to McMichael's (1984 a, b & c) studies with 146 and 177 students. Only one study (Pryce & Reeves 1997) using qualitative data collection methods gives sufficient detail to allow comment on the participant numbers and in this work data was collected from 36 students, 14 tutors, ten health care users and 30 student-controls. All the major professions involved in health and social care are represented in the studies reviewed, the nature and setting determining the professional mix for each study.

Response rates, when given, are good, e.g. from 62 of 79 (81%) of therapists and 67 of 98 (68%) of controls for Ashtons (1992) and from 65 participants and 58 controls, with follow-up responses from 40 participants and 49 controls for Brown (1993, 1996).

Attention to the analytical techniques applied to the data collected on the evaluations of interprofessional education reviewed here indicates the popularity of representational statistics. This is to be expected with the number of questionnaires used, and the tendency within these to collect quantitative data using Likert-type scales in measuring changes by pre/post tests of knowledge and attitude. A few studies give details of more sophisticated analytical tests, e.g., Ashton's (1992) quasi-experimental study reports the use of arithmetic means, tests of variance, and chi-square and t-tests and Hewstone et al (1994), Carpenter & Hewstone (1996) and Carpenter J (1995a&b) used analysis of variance (ANOVA) tests. We found little evidence about the techniques used to analyse qualitative data and this makes it difficult to comment on the rigour of the empirical work. Impressionistically, it appears that the researchers themselves are frequently the data collection tools, i.e., they conduct the interviews and observations. Issues of importance in the interpretative paradigm such as researcher bias and saturation of data, remain unexplored, except by Pryce and Reeves (1997).

We now go on to relate the findings from this Review to our modified version of Kirkpatrick's (1967) typology on learning outcomes.

Learners' reactions

Results relating to learners' reactions could be clearly identified in ten of the 19 studies reviewed. Overall, it seems that learners find interprofessional education an enjoyable and valuable experience. The positive experience of interprofessional education is also implicit in a number of papers that concentrate on reporting other outcomes, such as changes in attitudes and knowledge. Given that reaction is the easiest outcome to measure, it is unsurprising that this is apparent in the results of most studies. Comments are also found that indicate the practical difficulties, such as large group size and time tabling clashes, faced by educators, and felt by students during interprofessional education sessions. These will reduce student satisfaction and are very real issues for the smooth delivery of undergraduate pre-registration interprofessional education.

Modifications of attitudes or perceptions

In 12 of the studies the effect of the interprofessional education intervention on the attitudes of the learners towards colleagues from other professions was, in some way, assessed. Reports on this vary in their detail from simplistic and clear statements that 'over half of the students felt they had learned more about each other's role' (Hasler

& Klinger 1976) to expanded comments about interprofessional education being able to bring about 'positive shifts in understanding of the other as a person ... and a broadening of outlook' (Nash & Hoy 1993). With the exception of the work by McMichael et al (1984 a,b,c), who report positive and negative changes in attitude, all the studies with pre-registration students indicate that the experience of interprofessional education had positively changed their perceptions of peer professionals. In particular, Parsell et al (1998) report 'small changes in knowledge and attitude ... related to the less well known professions'.

Acquisition of knowledge and skills

As outcome assessment moves through Kirkpatrick's classification it is increasingly difficult to identify the impact of the intervention and to be clear about the changes that resulted from participation in interprofessional education. In a few studies, e.g., Bolden & Lewis (1990), changes in knowledge are reported but most commonly it is the ability to work as part of a team that is enhanced, especially so for interventions involving post-qualifying practitioners, and very apparent where PHCTs participate in workshops.

Changes in behaviour

A number of the studies give participants' reports on changes in professional practice, or detail the observation of changes in practice, following interprofessional education. In both Spratley (1990) and Spencer et al (1993) changes in the behaviour of PHCTs are reported that included reviewing current practice, development of methods of enhancing teamwork and production of an audit plan. Similarly, Nash & Hoy (1993) report the effectiveness of some of their workshops on practice in relation to care of the terminally ill in the community. More direct improvements in practice are reported by Hutt, (1994) using practice related indictors such as specialist clinics and nurses, and disease registers and protocols, although not all the indicators used showed positive changes from pre to post test results. Lacy (1998), through information collected by informal discussions identifies 'increased confidence as a widespread gain from the course' and, by third party observations in workplaces, 'increased collaboration initiated by colleagues who had attended the course'. Of importance is the Lacy's (1998), report of some participants ability to make changes to their own practice but an inability to change the practice of colleagues. The issues associated with learning lessons from personal experience of interprofessional education that are politically difficult to implement in the real world of practice should not be underestimated and need to be addressed during the intervention. The aim must surely be to empower interprofessional education participants to manage personal change and sensitively handle reactions from their colleagues to their newly found enthusiasm for collaboration.

Unsurprisingly, the changes reported in this section are all related to interprofessional education for post-registration learners. For undergraduates, whether they have participated in short or extended interprofessional education, behaviour changes will be in the future and no long-term follow-up evaluations are presently reported.

Impact on the community or organisation

Two of the studies reported on the effect of interprofessional education in relation to the wider community of health and social care. In keeping with the strong emphasis on strategies to improve communication within primary health care teams (PHCTs), Spratley (1990) also reports improvements of inter-agency communication, i.e.

between PHCTs and local health and social care agencies, community groups, and clients and users. PHCTs also feature in the second example with Thomas (1994) reporting facilitating the work within general practices as evidence of the success in implementing Local Multi-disciplinary Facilitation Teams. Again, that this relates to post-registration interprofessional education is unsurprising and given the increasing literature about interprofessional education in primary care settings it was most likely that the only reported examples of outcome at this level of Kirkpatrick's model would be located in this particular care setting. These examples are in a minority due to the challenges in measuring the impact of education at this level of sophistication, removed as it is from point of delivery to the learner. Note also that, methodologically, the evaluations of Spratley (1990) and Thomas (1994) do not necessarily withstand the scrutiny needed to give formal significance to their results and to permit suggestions of generalisability. However, their results are of importance in a developing field of educational evaluation and are to be applauded for the insight into the wider impact of interprofessional education that they possibly suggest.

Benefits to patients or clients

Thomas (1994) and Hutt (1994) provide the only examples of the potential for interprofessional education to benefit direct care to the client or patient. Thomas gives results of quantitative comparative judgements of the targeted geographical area, i.e., the area from which the PHCTs involved in interprofessional education were drawn, the rest of the City and a Liverpool Family Health Services Authority that shared several characteristics with the target area, mainly on changes in immunisation and cervical cytology rates. Hutt showed that the intervention group was able to improve the care of diabetic patients, as indicated by a significant improvement in fructosamine levels (a measure of a degree of diabetic control) for their cohort of patients. Fructosamine levels, as intermediate clinical outcomes, are a good predictor of the likelihood of development of future diabetic complications.

8 The Implications

The threefold classification of methods of evaluation, outcomes and interprofessional education formulated in Section 4 proved to be a useable and useful framework within which to locate the examples reported in Section 6. It revealed which methods of evaluation have been tried so far and which remain to be tried. It also confirmed our suspicion that few outcomes had been measured beyond the stage of the acquisition of knowledge and skill. It was reassuring that the variables included in the provisional typology of interprofessional education were applicable and this has encouraged us to use the same classification in our continuing work. Given the dearth of evaluations of professional education, the attention presently being given to interprofessional education is gratifying, but we also have reservations.

Improving and extending methodology

Evaluations were, for the most part, conducted by the teachers and trainers themselves. This deserves to be applauded, but carries constraints. Familiarity with the programme clearly has advantages, but the downside can be loss of objectivity, lack of time and limitations on methodological range. Few researchers have evaluated more than one programme. Most evaluations have been conducted in isolation. Few make reference to other evaluations or demonstrate awareness of the wider literature

and there have been few opportunities for researchers to compare experience.

A research culture is, however, beginning to emerge within interprofessional education in health and social care. This promises to provide mutual support and to enable researchers to build upon the experience of one another. The field may now also be of sufficient interest to attract more full-time researchers and research units. This should begin to establish critical mass. Welcome though more full-timers researchers will be, most evaluations of interprofessional education will, in all probability, still be conducted by the teachers and trainers themselves. This stresses the need for guidelines to alert part-time researchers, especially, to the systematic application of a range of research methodologies to the evaluation of interprofessional education. This is a task to which we shall be turning our attention shortly.

Pending further progress with the Parallel Review (see Appendix 4) it would be premature to make suggestions regarding the future evaluation of interprofessional education. Nor when the time comes to do so, does JET envisage commending one methodology in preference to another. Rather, we see the need to widen the range of methodologies employed and to strike a balance between evaluation of process and outcome. The former is essentially qualitative, the latter often quantitative. Where findings refer to outcomes, it is vital to explain the learning process in sufficient detail to permit the reader to make sense of them.

We doubt whether randomised controlled trials will become widespread in interprofessional education in health and social care given the cost, expertise required and the logistical obstacles. We nevertheless attach importance to testing and developing that methodology in combination with the qualitative evaluations of process.

We question the value of measures following completion of interprofessional education without the inclusion of measures beforehand to provide bases for comparison. We regret that more has not been done to follow up students on completion of interprofessional education to test how far changes in attitude or knowledge are sustained and learning is applied to practice.

This points towards interrupted time series studies before, during, after and some time after the interprofessional education (again accompanied by evaluations of process) in which case attention may need to be paid especially to ways to sustain response. We also see scope for comparative studies that apply the same methodology to interprofessional education programmes which, albeit similar, differ in key respects such as the interactive learning methods employed. There is, however, much that can be done more modestly to enhance understanding of interprofessional education, especially by means of case studies, which also provide bases for comparison.

Improving presentation

The burgeoning literature on interprofessional education contains numerous examples of evaluation from which researchers, not least those new to the field, can learn. This Review offers a way into UK sources. The Parallel Review will do so for world wide sources. But the clarity with which research methods, findings and interprofessional learning processes are reported is often less than adequate. In the course of this Review, we have struggled repeatedly to deduce essential information. Some examples of interprofessional education evaluation were rejected for lack of explicit data, even though we suspected that the evaluation conducted was better than the report. Without clearer presentation evaluations cannot be replicated and compared,

nor can the implications for the design and delivery of interprofessional education be determined with confidence. There are lessons here not only for researchers, but also for journal editors accepting papers for publication.

Putting this Review in the wider context

It would be foolish to attempt to draw conclusions about the efficacy of interprofessional education on the strength of UK experience alone. We are increasingly confident that our ongoing work based upon evaluations of interprofessional education world wide will shed light upon the relationship between form, content, learning methods and outcomes for at least some types of interprofessional education. Armed with these data, types can be targeted where future evaluations may be most productive to inform policy and practice in interprofessional education in the context, first, of policy and practice for professional education and, second, strategies to improve services to patients and clients through closer collaboration.

Meanwhile, this Review presents our attempt to capture the current state of the art of evaluation in interprofessional education in the UK, to provide researchers at home with the means to take stock of collective progress in the field and those abroad to acquaint themselves with developments in the UK. If this helps to establish the place of UK researchers in the international community of researchers working to establish the evidence base for interprofessional education, we shall be well satisfied.

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10 Appendix 1

The British Educational Research Association (BERA)

BERA was founded in 1974 and has about 890 members. It is governed by an Executive Council that reports once a year to a general meeting of members. It has the status in the UK of a learned society. It publishes the British Educational Research Journal five times per year, Research Intelligence for its members four times per year and occasional papers in BERA Dialogues.

The aim of the Association is to sustain and promote a vital research culture in education: -

By encouraging an active community of educational research,

By promoting co-operation and discussion with policy makers, institutional managers and funding agencies with other national educational research associations and the European Educational Research Association with other researchers in the social sciences and related areas of work with teachers and lecturers and their associations,

By encouraging and supporting: debate about the quality, purpose, content and methodologies of educational research,

By developing and defending an independent research culture committed to open inquiry and the improvement of education,

By enhancing: the professional service it provides for its members, effective communication and discussion within BERA and the training and education of educational researchers, their effectiveness, conditions of work and rights.

11 Appendix 2

The UK Centre for the Advancement of Interprofessional Education (CAIPE)

CAIPE was founded in 1987 to promote interprofessional education as a means to improve collaboration between practitioners in health and social care. It treats interprofessional education and practice as two sides of the same coin. Whilst focusing upon interprofessional relations, it takes into account collaboration between organisations and with service users, their carers and communities.

CAIPE is a company limited by guarantee and a registered charity. Individual members are drawn from education, management, medicine, nursing, professions allied to medicine, social work and related professions. Corporate members include colleges and universities, education consortia, health authorities and trusts, local authority social services departments, primary care groups and voluntary organisations.

Working with and through its members, CAIPE provides a network for information exchange and discussion by means of conferences and seminars, a bulletin and occasional papers. It supports and sometimes commissions research, represents members` views in national and international forums, and works in partnership with other bodies to promote and develop interprofessional education and practice.

CAIPE welcomes the renewed emphasis upon collaboration in Government policies for health, social care, and the public service generally. Its current priorities include the cultivation of collaboration in and surrounding Primary Care Groups, in Health Action Zones and between Health and Social Services. It is working to reinforce work-based learning, drawing upon the resources of both service agencies and universities.

CAIPE welcomes opportunities to collaborate with other organisations in pursuit of shared goals. CAIPE`s Chief Executive, Barbara Clague, will be pleased to tell you more. Do write or call her at CAIPE, 344-354 Gray` s Inn Road, London WC1X 8BP, telephone 0171 278 1083, fax 0171 278 6604.

12 Appendix 3

The Cochrane Review

This Review was undertaken under the auspices of Cochrane Collaboration, subject to criteria and procedures agreed with EPOC (the Cochrane Effective Practice and Organisation of Care group).

Commemorating the late Sir Archie Cochrane, the distinguished British epidemiologist, Cochrane Collaboration operates through fifteen Centres world wide and numerous Review Groups. Each Group conducts a systematic and unbiased Review of evaluations of an intervention, therapy or treatment followed by a summation of the results and, where sufficient comparable studies are found, produces an overall assessment of harms and benefits. EPOC Reviews include evaluations of interventions designed to improve professional performance, patient care, and thus health outcome.

For the purposes of our Review, interprofessional education (interprofessional education) was defined as "an educational activity in which interaction takes place between learners from various professions, with the purpose of improving their working collaboration and, through this, their impact on the health and well-being of their clients. This definition was broad enough to include interprofessional education that was brief or extended, at any stage from pre-qualifying to advanced studies, either award bearing or not, formal or informal, in college or at work.

Two electronic databases were searched (Medline since 1966 and CINAHL since 1982). We also called upon help from CAIPE members to find unpublished studies. As agreed with EPOC, evaluations to be included had to be Randomised Controlled Trials (RCTs), Controlled before and After Studies (CBA) or Interrupted Time Series (ITS).

Rigorous preparation ensured consistency of judgement between the Group members in interpreting the definition of interprofessional education and the three methodologies. Each abstract was scrutinised independently by at least two members of the Group to determine whether it met the criteria. Over a thousand were retrieved – 510 from Medline and 552 from CINAHL. None of the additional studies drawn to our attention by CAIPE members met the criteria. Of these 1062 abstracts full texts were called for on 44 from Medline and 45 from CINAHL. Two or more members of the Group reviewed each of the 89 papers. There was consensus that none of these papers was eligible for inclusion in the Review.

We concluded that there was no research evidence that met the strict inclusion criteria of the Cochrane process regarding the effectiveness of interprofessional education. It is important to stress that this does not imply that interprofessional education is ineffectiveness, simply that there is no evidence from studies of this type for the efficacy of interprofessional education.

Further reading

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Barr, H., Hammick, M., Koppel, I., and Reeves, S. (1999b) Evaluating

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13 Appendix 4

The Parallel Review

Anticipating that the Cochrane Review might produce few evaluations that met the criteria agreed with EPOC, it was decided at an early stage to embark upon a Parallel Review. This would be no less rigorous with the same safeguards against bias and the same definition of interprofessional education (interprofessional education), but with two important changes. First, it would allow for a wider range of research methodologies, both qualitative and quantitative that, albeit thorough, fell outside the criteria for inclusion in the Cochrane Review. Second, it would allow for a range of outcomes of which benefit to patients would be one.

These decisions were guided by several considerations: to establish `the state of the art` in evaluating interprofessional education; to value qualitative studies that might shed light upon the form and process of interprofessional education; and to be realistic about the objectives that teachers and trainers, themselves, set for interprofessional education. Not least, we wanted to find enough usable evaluations to be able to compare and contrast different types of interprofessional education in terms of both process and outcome.

Our decision, we acknowledged, might expose us to criticism from those for whom it was a departure from the `gold standard` prescribed by Cochrane. Our response is this. First, the Parallel Review, like the Cochrane Review, would search no less diligently for Randomised Controlled Trial (RCT), Controlled Before and After Studies (CBA) and Interrupted Time Series (ITS) and include them, if and when found. Second, they would be taken into account when the Cochrane Review was repeated. Third, advice about conducting RCTs, CBAs and ITSs would be included in a future publication about the evaluation of interprofessional education, alongside other methodologies, and their adoption encouraged where feasible and applicable.

The aims of the Parallel Review are to:

- evaluate the strength of evidence of interprofessional education outcomes;
- explore relationships between outcomes in interprofessional education and aspects of curriculum design.

Instead of asking whether interprofessional education (in general) changes practice and benefits patients, this Review asks what kind of interprofessional education, under what circumstances produces what kind of outcomes. This will take into account stage, location, duration, professions involved, validation (if any), curriculum content and methods, and other factors. Outcomes will take into account participants` reactions, learning, behaviour and impact on organisation and practice.

So far, Medline has been searched from 1966 to 1998 from which 2,868 paper potential papers have been found. Scanning these the team produced 224 `hits`. Of these papers received to date we have agreed that 73 qualify for inclusion in the Review. Other databases (e.g. CINAHL, ERIC, Psychlit and Embase) will be checked before embarking upon the analysis.

Further reading

Barr, H., Hammick, M., Koppel, I. & Reeves, S. (1999) Evaluating interprofessional education: Two systematic Reviews for health and social care. British Educational

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Appendix 5

The Incidence of Interprofessional Education in the United Kingdom.

The 1988 national survey

In 1988, CAIPE commissioned a postal survey of interprofessional education in primary health care throughout Great Britain to be undertaken by the Institute of Community Studies (Shakespeare et al, 1989). Interprofessional education was taken to include any activity whose primary objective was educational, and involved practitioners or students from two or more of the selected professions[3] where participants were learning together in a multidisciplinary context.

Data were collected about title, subject matter, objectives, organising agency, responsible professions, location, frequency, duration, educational methods, number and professional background of participants, educational context and level, compulsory or optional attendance, evaluation and continuation.

Questionnaires were targeted at directors of nurse education, heads of midwifery services, course organisers for district nursing, health visiting and social work, social services training officers, deans of medical schools, regional advisers in general practice, general practice tutors and others.

A total of 1,518 questionnaires were sent and 1,479 returned (75%) producing 695 valid examples of interprofessional education. Health visitors participated in 88% of these, district nurses in 73%, social workers in 46%, general practitioners in 37% and community midwives in 32% in various combinations. Most of the "initiatives" reported comprised continuing education or professional development (83%). Agencies most commonly engaged in organising interprofessional education were schools of nursing and midwifery, colleges and universities and health authorities. Respondents ranked "promoting teamwork" and "increasing understanding of the roles and views of other professions" most highly as objectives. Subjects ranked most often covered were child/family abuse and teamwork/professional roles. Ninety five percent of initiatives had ten or more participants and 56% had 20 or more. Educational methods most used were group work/discussion, lectures, and experiential learning. Over half the initiatives lasted for day or less and only 18% for more than four days. Respondents reported that 72% of initiatives had been evaluated, but no further information was provided. In 86% of cases respondents said that the initiative would probably be or definitely be repeated.

A local survey of provision and uptake in two English counties

Shaw (1995) surveyed provision and up-take of interprofessional education between September and December 1993 in two English counties by telephone and interview. Providers were university departments including medical and nursing schools, in-service training sections of social services departments, health authorities and trusts and voluntary organisations, police training colleges and the Open University.

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[3] These were: general practitioners, social workers, district nurses, health visitors and community midwives.

Service units surveyed regarding up-take comprised a sample of 240 residential and day centres (but not fieldwork units) in private, voluntary and statutory sectors of health and social services.

Shaw found that provision in the two counties was markedly higher than that reported in the 1988 national survey. However, when service units were asked whether their staff had attended interprofessional courses, 98% said not. Further inquiry about these other courses that staff had attended revealed that a small but significant number were designated as interprofessional by the providing educational institution.

The 1995 National Survey

In 1995 CAIPE decided to repeat the earlier survey and to extend it to include the whole of the United Kingdom i.e. including Northern Ireland (Barr and Waterton, 1996). This second survey covered all education and training initiatives where two or more health/social care professions learned together in any work setting (not only primary care). Two postal questionnaires were sent out. The first went (so far as possible) to the same groups that had been canvassed in 1988 with some additions. It sought answers to basic questions about the incidence of interprofessional education. The second was sent to all those who replied to the first, seeking additional information about the form and content of initiatives.

Of 2,498 copies of the first questionnaire sent out a quarter were returned from which 251 valid replies were received reporting on 455 initiatives. Limited resources precluded sending reminders. An 80% response rate was, however, achieved for the second questionnaire, suggesting that a core of committed participants had been identified. The low initial response rate rendered invalid any comparisons between the 1988 and 1995 surveys.

Most initiatives were instigated and run by universities/colleges or health authorities/trusts, many of them jointly between the two. Two to five days was the typical duration with two to five teachers and 16 to 20 participants. Nursing was the single largest group, followed by medicine, social work, and management. Topics were wide-ranging and defied easy classification. Some dealt with life stages (from childbirth to palliative care), health conditions (from asthma to mental illness), disabilities (learning, physical and sensory), practice methods (notably counselling), research, service management, and so on. Respondents reported a strong preference for interactive learning methods. Nine tenths of the respondents reported that their initiatives had been evaluated, of which nearly half involved an independent person or organisation. Few, however, had been written up and even fewer published. Four fifths of the respondents said that there were plans to repeat their initiatives.

A local survey of involvement in multiprofessional continuing education

Owens et al (1999) conducted a postal survey to establish the up-take of multiprofessional continuing education by 4,954 practitioners from 24 professions[4] working in North and East Devon. Multiprofessional education was defined as any

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[4] These were: school nurses, managers (other than practice managers), physiotherapists, midwives, speech therapists, health visitors, chiropodists/podiatrists, pharmacists, clinical psychologists, dentists, community psychiatric nurses, practice nurses, occupational therapists, district nurses, hospital nurses, general practitioners, radiographers, practice managers, medical laboratory scientific officers and hospital doctors.

educational or training event at which members of two or more health professions are present together. It was not considered feasible to ask respondents to distinguish between multiprofessional and interprofessional education, i.e. learning together in general and learning together to cultivate collaboration.

Of the 2,116 replies (43%), nearly three-quarters said that they had been involved in some kind of multiprofessional education during the preceding twelve months. Of these, 35% had attended two multiprofessional courses and 18% three or more. Levels of involvement varied, however, between professions. Those reporting the highest level of involvement were health visitors, clinical psychologists, occupational therapists, and district, school and practice nurses. Those reporting the lowest level of involvement were radiographers, chiropodists, medical laboratory scientific officers, dentist, and pharmacists. However, three quarters of all respondents (especially younger ones) wanted more opportunities for multiprofessional learning.

Half the courses were concerned with clinical issues. The remainder ranged over teaching and supervision, management issues, professional development, social issues, routine safety training, counselling and research. Asked what subjects they would be most interested in learning about, 70% said counselling and communication skills. Courses were most often run by participants` own employers (38%), with universities and college accounting for only 17%. Less than a fifth carried credit towards an award.

Comment

Differences in definition of relevant education, catchment areas, professions and services included, methodology and response rates render comparison between the findings of these surveys suspect, but taken together they highlight a number of issues:

difficulty in using survey methods to distinguish between interprofessional and multiprofessional education;

differences of perception between providers and purchasers about the aims of initiatives;

the higher incidence of learning together reported by local than national surveys;

the higher incidence of employment-based education reported by participants than by providers being less likely to perceive a course as interprofessional than providers.

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Paper C2

Evaluating interprofessional education

Chapter 14

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Evaluating interprofessional education

Hugh Barr

Like audit, monitoring, review, evaluation and research, interprofessional education (IPE) is a seemingly precise term accorded many meanings. Opting though it must for one overarching term, this chapter is nevertheless more concerned with purpose, process and outcomes than semantics. It summarises ways in which IPE has been evaluated, as reported in surveys and reviews, introduces questions framed by the UK Centre for the Advancement of Interprofessional Education (CAIPE, 2002) and takes into account benchmarking for undergraduate IPE in the UK. It ends with recommendations for good practice.

Findings from surveys and reviews

A UK survey of IPE initiatives undertaken in 1991 revealed that while nine-tenths had, according to respondents, been evaluated, only a quarter of these had been written up and still fewer published. Evaluation was most frequently based upon participants' satisfaction, although half reported that they took the opinions of other stakeholders into account. Half also said that they had employed before and after measures to record changes in participants' attitudes or perceptions, while others said they had observed the impact of learning on collaborative practice (Barr and Waterton, 1996).

The survey confirmed the experience of Barr and Shaw (1995) who had found only 19 published UK evaluations from an online library search and their knowledge of the field. Reports differed in the degree to which they exposed methodology to critical review. Some obliged readers to take research methods and data on trust. Others spelt out both, notably McMichael *et al* (1984), Gill and Ling (1994), Shaw (1994), Carpenter (1995a,b) and Carpenter and Hewstone (1996).

Evaluations took into account one or more of the following:

- programme planning, development and delivery
- learning process
- participants and their participation
- participant's satisfaction with the learning
- participants' assessment of their learning
- changes in participants' attitudes, perceptions and/or knowledge
- impact on participants' practice.

Data were collected by observation, questionnaire and sometimes interview. Most college-based courses limited attempts to measure outcomes to stated course objectives.

Five years later, the Interprofessional Education Joint Evaluation Team (JET) also selected nineteen evaluations to include in its UK literature review, from forty considered (Barr *et al*, 2000). (Of the nineteen, Barr and Shaw, 1995, had included four.) Teachers and trainers had conducted most of the evaluations themselves. These tended to be formative, concerned more with stakeholder satisfaction than meeting externally determined criteria. Methods again included questionnaires, interviews and observation, but there were also focus groups and analyses of students' essays.

Ten studies evaluated student satisfaction. Twelve reported changes in attitude towards colleagues and other professions. Fewer reported acquisition of knowledge, only seven reported changes in practice, and only two reported direct benefit to service users, in one case improved immunisation and cervical cytology rates (Thomas, 1994) and in the other improved diabetic control (Hutt, 1994).

This UK review was a spin-off from JET's main work, which comprises two systematic reviews of databases for evaluations of IPE worldwide.* The first has been completed (Zwarenstein *et al*, 1999, 2001) and the second is close to completion at the time of writing (see Freeth *et al*, 2002, for the most recent report).

Both were restricted to IPE where:

> *'Members (or students) of two or more professions associated with health or social care were engaged in learning with, from and about each other.'*
>
> (Zwarenstein *et al*, 1999)

The research question, however, differed. The first review asked simply:

> *'Does IPE work?'*
>
> (Zwarenstein *et al*, 2001)

The second asked:

> *'What kind of IPE works under what circumstances?'*
>
> (Freeth *et al*, 2002)

The first review was conducted under the auspices of the Cochrane Collaboration, subject to agreed criteria as follows. Evaluations had to comprise randomised controlled trials, controlled before and after studies, or interrupted time-series studies, and had to report outcomes demonstrating direct benefit to patients or clients. None were found that met both criteria.

The second review takes into account a wider range of research methodologies

*The Cochrane Group for the first review comprised Merrick Zwarenstein, Jo Atkins, Hugh Barr

than the Cochrane Review and a continuum of outcomes. By April 2002, 162 papers had been included from Medline (1968–2000), 179 from CINAHL (1982–2001) and three from the British Educational Index (BEI) (1964–2001) from more than 6000 abstracts checked. Allowing for the 124 papers appearing in both Medline and CINAHL, the total number of evaluations included in the review was 217 at that time, and was expected to rise as other databases were searched.

Of the 217 evaluations included, 184 (85%) had been published since 1990, and 128 (59%) since 1995, reflecting both the growth in IPE and its evaluation. More were based in hospitals (104; 48%) than in the community (87; 40%), the remainder being in both or unclear. Substantially more were post-qualifying (150; 69%) than pre-qualifying education (55; 25%), the remainder being mixed.

Most were from the USA (170; 78%), followed by the UK (26; 12%); the remainder were from Australia, Canada, Norway and Turkey. The relevance of US evaluations to UK education and practice is open to challenge, given their fundamental differences in education and healthcare systems, but the programmes described, research methods used and findings are sufficiently similar to those from the UK to encourage comparison.

The research designs employed were classified as shown in *Table 14.1*.

Positive outcomes reported were classified as shown in *Table 14.2*, using a modified version of the scale formulated by Kirkpatrick (1967).

Table 14.1: Classification of research designs employed (N=217)

Research design	No. (%)
Post-intervention, single time point	56 (26%)
Post-intervention, single time point, with control	6 (3%)
Post-intervention with follow-up	6 (3%)
During and after study	1 (<1%)
Before and after study	46 (21%)
Controlled before and after	8 (4%)
Before, during and after	6 (3%)
Before and after with follow-up	11 (5%)
Longitudinal	45 (21%)
Longitudinal with control group	2 (<1%)
Randomised controlled trial	1 (<1%)
Action research	1 (<1%)
Case study	1 (<1%)
Not given	27 (12%)

Table 14.2: Classification of positive outcomes (N=217)

Positive outcome	No. (%)
Learners' reactions	96 (44%)
Modification of attitudes/perceptions	33 (15%)
Acquisition of knowledge/skills	78 (36%)
Change in individual behaviour	49 (22%)
Change organisation of practice	93 (42%)
Benefit to patients	47 (21%)

These outcomes were tabulated against characteristics of IPE, such as location, duration of the course, stage in participants' experience and structure included in the provisional typology floated by Barr (1996).

Analyses of the JET data found correlations between outcomes and duration and location of the course.

⌘ Comparison of positive outcomes with duration of the learning showed that short programmes (*one day to two weeks*) were more likely than long programmes (>2 weeks) to change practice and benefit patients (*Table 14.3*).

⌘ Comparison of positive outcomes with the location of the learning showed that work-based programmes were far more like to change practice and benefit patients directly (*Table 14.4*).

It must be borne in mind that university-based programmes rarely aim to do more than modify attitudes. Furthermore, measuring impact on practice is problematic, given that students come from or enter many different places of work.

A review by Cooper *et al* (2000, 2001) is broader and narrower than the JET review: broader in that inclusion criteria extended beyond evaluation, and narrower in that it focused upon undergraduate education. Like JET, Cooper and colleagues developed an alternative to the Cochrane protocol. They found wide variations in methodological rigour, including:

- selection bias — lack of controls
- attrition bias — lack of information on attrition rates
- detection bias — differences in the methods used to assess outcomes and selective reporting of results
- use of non-validated instruments to measure outcomes
- inadequate description of statistical analysis.

Table 14.3: Comparison of positive outcomes and duration of IPE

Positive outcome	Short programme (n=67)	Long programme (n=132)
Reactions	49 (73%)	41 (31%)
Attitudes	13 (19%)	15 (11%)
Knowledge	38 (57%)	33 (25%)
Individual behaviour	14 (21%)	29 (22%)
Organisational practice	13 (19%)	72 (55%)
Patient benefit	3 (4%)	39 (29%)

Table 14.4: Comparison of positive outcomes and location of IPE

Positive outcome	University *(n=47)*	Work *(n=152)*
Reactions	33 (70%)	46 (30%)
Attitudes	13 (28%)	14 (9%)
Knowledge	30 (64%)	37 (24%)
Individual behaviour	7 (15%)	41 (27%)
Organisational practice	4 (9%)	89 (59%)
Patient benefit	1 (2%)	44 (29%)

Unlike the systematic reviews conducted by JET, the majority of the studies reviewed by Cooper *et al* (2000; 2001) had been published in the UK and included more undergraduate IPE than is likely to be found in other countries. Of 141 studies found, thirty were deemed to be sufficiently rigorous to include in the review, of which sixteen were classified as evaluations and fourteen as research studies. Of these fourteen, eleven used quantitative design and three qualitative design. Attention focused primarily on the measurement of process variables to ascertain whether the intervention was successfully applied and was operating in the expected direction. Questionnaires were the most common method, but only 35% of studies used validated instruments. New instruments were designed without considering reliability and validity.

Systematic reviews such as these are an expeditious, economic and effective way to locate evaluations that satisfy defined criteria. They are the best available means to establish what has been evaluated, how and by whom. Their consistency and transparency does much to reduce reviewer bias, to expose process to critical appraisal and to facilitate replication and updating.

But bias is not wholly eliminated. There is the time lag between completion of a programme, publication of its evaluation, entry in one or more databases and pick-up by a systematic review; more recent evaluations are missed. There is bias in the databases that reviewers choose to search and in the languages (invariably English) that databases and reviews cover. There is bias, too, in favour of 'success stories' in evaluations written up, submitted for publication and accepted by journals.

The quality of evaluations reported may therefore be atypical — the tip of the proverbial iceberg — with less rigorous and less positive evaluations beneath the surface. The fact that the quality of evaluations reported is uneven and reportage often incomplete does little to inspire confidence in the general standard of evaluation of interprofessional education.

Some critical questions

Evaluation of IPE draws upon methods employed in mainstream education. It must, however, take into account the distinguishing characteristics of IPE. The Centre for the Advancement of Interprofessional Education has therefore framed the following questions, which it invites individuals and organisations evaluating IPE to take into account (CAIPE, 2002).

Do the stated objectives claim to promote collaborative practice?
Noting that collaborative learning between professions can prepare for collaborative practice between agencies and with communities, service users and their carers, as well as between professions.

How are those claims substantiated?
Establishing whether content and learning methods can deliver the objectives that work towards collaborative practice.

Does the collaboration contribute to improving the quality of care?
Recognising that collaboration is only a means towards improvement in services, provision of care and patient benefit.

Are the objectives compatible?
Bearing in mind that promoting collaboration may be one of many objectives with different implications for structure, content and learning methods.

How is IPE built into the programme?
Ensuring that IPE is woven coherently into structure, content and learning methods throughout.

Is the programme informed by a theoretical rationale?
Introducing theoretical perspectives to inform programme design, teaching and learning about collaborative practice.

Is the programme evidence based?
Basing teaching and learning on evidence from research, including outcomes from systematic reviews of IPE and practice.

Is the programme informed by interprofessional values?
Helping to secure the value base for IPE and practice, and identifying common values across professions while also exploring differences between them.

Does comparative learning complement common learning?
Enabling participating professions to learn from and about each other to inform intelligent collaboration based on appreciation of each profession's distinctive contribution to practice.

Are learning methods interactive?
Employing a repertoire of interactive methods that engage participants in such exchange through joint assignments designed to facilitate comparative learning.

Is small group learning included?
Investing in small groups that optimise interactive learning, suitably accommodated with generous staff:student ratios.

Will numbers from each profession be balanced?
Recruiting, so far as is practicable, comparable numbers from each of the participating professions, introducing quotas if necessary.

Are all the professions represented in planning and teaching?
Involving teachers or trainers from all the participating professions in programme planning, delivery and evaluation.

Are service users and carers involved?
Involving service users and carers in programme design, teaching, assessment and evaluation, and as co-participants, to emphasise learning for user-centred service.

Will interprofessional learning be assessed and count towards qualification?
Adding to the value of interprofessional learning, in the eyes of participants, teachers, employers and others, by including it in assessment for awards.

Will the programme be evaluated?
Ensuring that all IPE is subject to audit or review and subjecting programmes to more systematic evaluation.

Will findings be disseminated?
Sharing lessons learned with comparable programmes in other institutions. through conference presentations, reports and journal articles.

Benchmarking

Particular requirements apply to for the review of undergraduate IPE in the UK made by the Quality Assurance Agency (QAA) for Higher Education on behalf of the Department of Health and other government departments. These comprise benchmark statements for nursing and each of the allied health professions, formulated in consultation with representatives of each of those professions. Common statements have been agreed for common learning (QAA, 2001).

CAIPE welcomed the balance struck between statements specific to each and common to all these professions, especially the inclusion of statements about collaboration. It questioned, however, whether these were sufficient, without further work, to ensure that newly qualified workers would be ready for collaborative practice (Barr, 2002).

Evaluation in future

IPE takes many forms, calling for different approaches to evaluation, making different claims on resources. The evaluative design must be sensitive to the distinctive characteristics of each programme. Generalisation is hazardous and guidelines are premature. There is as much room for imagination and innovation in the evaluation of IPE as as there is in its design and delivery.

Some programmes merit more rigorous evaluation than others, for example, those that break new ground in the needs they address, the learning methods they employ or the professions they include. But they all require some evaluation.

Many evaluations are formative, designed to help teachers and students determine whether the programme has fulfilled its stated objectives, to assess the effectiveness of the methods employed, and to inform decisions about improvements for the benefit of future intakes. Methods such as questionnaires, focus groups and interviews may be used in much the same ways as for professional education, but introducing questions specific to interprofessional learning and the programme.

Useful though such evaluation may be, it does not suffice where the programme is subject to validation or review in accordance with externally determined criteria, whether external to the programme by the parent institution,

or to the institution by, or on behalf of, the funding body. These evaluations have a formative element, but are essentially summative, working to a predetermined standard and judging one programme against others.

Each validating and funding body lays down its own requirements, which are designed primarily for professional, not interprofessional, education. The QAA benchmarking standards are a major step towards making that transition, having implications for education beyond undergraduate IPE. The questions framed by CAIPE focus on qualities that should characterise IPE, and which need to be taken into account in any evaluation. Both can be used mindlessly and mechanistically as no more than checklists. Value is added when they are woven into approaches to evaluation, such as those reported in this chapter.

Most IPE is likely to be evaluated in accordance with external criteria, now that it has entered the mainstream of professional education. Some programmes will merit more sustained, more searching, and more rigorous evaluation to extend the evidence base for IPE. It is here that the following principles apply especially.

⌘ **Begin at the beginning**

Evaluation must not be an afterthought. It should be built into plans for the programme from the outset, and be included in the budget. Without this, preparation may be hasty, resources inadequate, consultation poor, and cooperation half-hearted. Initial intakes may be omitted, or only picked up towards the end, and the opportunity to evaluate the planning stages missed.

⌘ **Match objectives**

Objectives for the evaluation should be based upon objectives for the programme — no more and no less — and be concerned as much with the means by which they are achieved as with whether they are achieved.

⌘ **Evaluate process and outcomes**

Account should therefore be taken of both process and outcomes. Too many evaluations set out to measure changes in attitude, perception or knowledge, without even describing the learning experience, still less evaluating it.

⌘ **Choose your methods**

Different professions may prefer different research methods. Scientifically based professions, such as medicine, may prefer quantitative methods using experimental designs and treating randomised controlled trials (RCTs) as the gold standard. Nursing, social work and education may prefer qualitative methods. Time needs to be set aside to debate the relative merits of different methods as applied to education in general, and professional education and IPE in particular.

RCTs are essential for clinical trials designed to determine the safety and effects of drugs and medical interventions, but qualitative methods find more favour for evaluating education.

Given that only two RCTs evaluating IPE have been reported (Freeth *et al*, 2002), there is a persuasive case for putting them to the test, although the ethical, logistical and practical obstacles are formidable, and the dividends, in isolation from other research methods, unclear. Moreover, RCTs, if and when applied to IPE, will need to be performed by experienced researchers.

A well-planned evaluation will probably use two or more research methods — mainly qualitative to evaluate process, and qualitative and quantitative to evaluate outcomes.

⌘ Include before and after measures

Feedback after the programme may assess student satisfaction and inform future change, but it is meaningless to measure learning from the programme. This requires before and after measures, consistently designed and applied, keeping attrition to a minimum. Longer programmes may well introduce measures at intervening points, for example, at the end of each module.

⌘ Follow-up

One better, the evaluation may follow up students, say six or twelve months later, inviting them to comment, with benefit of hindsight, on their learning, and to report any ways in which they have sought to apply it in their work. Verification of the latter may be sought from line managers and service users.

Follow-up moves towards evaluating the impact of the programme upon practice, but the findings must be treated with extreme caution, given that so many variables may intervene, and the difficulties in tracing former students and verifying what they say.

⌘ *Build in controls*

Experimental design, such as RCTs, may be the exception. Quasi-experimental design is more realistic, albeit uncommon, in evaluating IPE. Matched control groups can be introduced reasonably easily.

⌘ Use validated instruments

Few, if any, instruments have been designed and tested for express use in IPE, although some have been 'borrowed'. There is a pressing need to discuss and determine what kinds of instruments are needed, and then to commission work to design, test and validate them.

⌘ **Replicate**

While there may be distinctive features of a programme to be evaluated in a distinctive way, difference for difference's sake is to be avoided. Inexperienced researchers would be better advised to replicate well-tried methods. Reports of evaluations should pay sufficient attention to research methods to enable others to replicate them. This is far from so at present.

⌘ **Involve all possible parties**

IPE has many stakeholders, for example, students, teachers, managers, and not least service users. The more perspectives taken into account, the more rounded and persuasive may be the findings.

⌘ **Beware of bias**

Teachers conduct most evaluations of IPE themselves. These benefit from their intimate experience of their programmes, but are liable to bias. One way to reduce this risk is to retain a researcher experienced in this field as a consultant, to be called upon at critical stages in the process.

⌘ **Be realistic**

Above all, be realistic. Nothing serves IPE worse than ill-founded and exaggerated claims. The more ambitious the evaluation envisaged, the stronger the case for bringing in external researchers. Resource implications will, however, dictate that their services are called upon selectively for the most innovative programmes.

Conclusion

Those who assert that there is no evidence for the effectiveness of IPE are either behind the times or unwilling to accept the validity of research methods other than those with which they are familiar in clinical trials.

The evidence base is painstakingly being secured, but evaluations are widely scattered in time and place, and uneven in rigour. The best are, however, exemplary, providing pointers for future evaluations of IPE.

Additional evaluations are still being found as further databases are searched, but with diminishing returns. Many have already been reported in other databases. Enough is now known to define the baseline for future evaluations, the questions to be framed, the studies to be replicated, the methods

to be employed, the instruments to be adopted, adapted or designed from scratch, and the pitfalls to be avoided.

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Paper D1

Thinking theory

Chapter 9

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Effective interprofessional education: argument, assumption and evidence.

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Chapter 9
Thinking Theory

Like Chapter 8, this chapter enters into territory which goes beyond findings from our review. It draws selectively on the wider literature to identify theoretical perspectives to illumine interprofessional education and practice. Other theories introduced into interprofessional education, but less well developed in that context, are mentioned briefly. We make no claim to be exhaustive. The theoretical base for interprofessional education continues to evolve rapidly. Our exploration of explicit and implicit theoretical influences on the development of interprofessional education may be a useful first step in synthesising a theoretical base for a maturing conception of interprofessional education.

Introducing theory

Numerous theoretical perspectives have been introduced into interprofessional education from different academic disciplines. Interprofessional education errs on the side of inclusion, weighing each theoretical perspective on its merits regardless of the academic discipline or practice profession from whence it comes. Few, however, have gained general currency so far, save perhaps for the influence of adult learning theories on the design and delivery of most interprofessional learning opportunities (chapter 7).

Nor is the case for theory universally accepted. Some exponents, in our experience, are eager to strengthen the explicit theoretical base of interprofessional initiatives. Others resist the very idea of theory-based interprofessional education, stressing instead its roots in practice and fearing academic drift. We view unease at examining theoretical perspectives as misplaced, subscribing to the view (Schön 1987) that practitioners constantly reflect-on-action and use this reflection to explain and predict phenomena and to shape future actions – that is they theorise.

Making theory explicit encourages systematic, disciplined and critical thinking. It informs decisions and generates propositions which can be tested.

Theory, like much in interprofessional education, is contested territory.

Noting theoretical perspectives from the review

It was unusual for any the 107 studies in our review to refer directly to a particular theoretical framework for interprofessional education (table 9.1). While only 24 studies (22%) explicitly cited the use of an underpinning theory in the development or delivery of the interprofessional education the descriptions of initiatives indicated widespread use of the general tenets of adult learning theories (discussed in Chapter 7 and below). Quality improvement initiatives that did not explicitly discuss an underpinning theoretical perspective were classified as making implicit use of the learning organisation perspective.

Underpinning theory	Frequency
Made explicit:	
Learning organisation	13 (12%)
Adult learning	8 (8%)
Contact theory	3 (3%)
Total	**24 (22%)**
Implicit in report:	
Adult learning	55 (51%)
Learning organisation	28 (26%)
Total	**83 (78%)**

Table 9.1: Underpinning theory

Studies that explicitly drew upon learning organisation theory tended to use principles of Total Quality Management (TQM) (e.g. Townes et al., 1995) or Continuous Quality Improvement CQI (e.g. Bonomi et al., 2002).

Of the small group of studies that explicitly drew upon theoretical perspectives from adult learning, five incorporated problem-based learning (e.g. Mann et al., 1996); while the remainder incorporated Knowles' theory of adult learning, Kolb's theory of experiential learning and/or Schön's theory of reflective practice (Lia-Hoagberg et al., 1997; Freeth & Nicol, 1998; Parsell et al., 1998).

Theoretical Perspectives on Interprofessional Education

Many theoretical perspectives have the potential to guide the development of interprofessional education and to aid understanding of interprofessional learning. We have selected those mentioned feature in the interprofessional literature. Encompassing a range of disciplinary traditions, they work best when they resonate with the practice context for interprofessional education and can be explained persuasively to stakeholders.

We assign these perspectives to the three foci for interprofessional education (see Chapter 6), according to the main emphasis but also taking into account overlap. For example, most theoretical perspectives that emphasise individuals also provide insights into interprofessional-group collaboration.

1. Preparing individuals for collaborative practice
    - Adult learning
    - Contact
    - Social identity
    - Self-categorisation
    - Realistic conflict
    - Self-presentation
    - Loss and change
    - Social defence
    - Relational awareness
    - Social exchange
    - Negotiation
    - Cooperation
2. Cultivating collaboration in groups and teams

- Work-group mentality
- Group development
- Team learning

3. Improving services and the quality of care
   - Systems
   - Organisational learning
   - Activity

We also return to discourse analysis on which we touched lightly in Chapter 1 in view of application in understanding interaction within and between interprofessional education and practice, and its relevance to communication studies.

Focus 1: Preparing individuals for collaborative practice

This set of theories share an emphasis upon the individual, but with implications often for their behaviour in groups and teams. Some are invoked to instigate change, others to understand the effect that change has on professions and their relationships with each other.

The tenets of a*dult learning theories* are perhaps the most pervasive in the design and delivery of interprofessional education. For example, active learning is enshrined in the definition of interprofessional education and reflected back in countless examples such as those in this book. In Chapter 7 we couched approaches to interprofessional learning and teaching in the context of principles of adult learning as set out by some of the more influential late 20th century writers in the field. Adult learning, according to those educationalists, is problem centred, cyclical, situated, shared and intimately entwined with doing, in short, the type of learning that improves individuals' performance in areas that matter to them. Adopting this perspective, interprofessional education can be expected to succeed where interprofessional collaboration matters to participants, the educational experience is active, valuing and building upon prior knowledge and practice experience, and is recognised as relevant to participants' developmental needs.

Perspectives from social psychology

But application of adult learning theories alone is not enough to underpin interprofessional education. There are a number of theories from social psychology which help inform interprofessional education, notably *contact theory*. Carpenter (1995) and Dickinson (2003) amongst others introduce this theoretical perspective into the development and evaluation of interprofessional education which is then more clearly seen as a means to modify attitudes and negative stereotypes.

Contact theory, developed from the work of Allport (1979) examined the origins of prejudice between different social groups where members identify with their own group to the detriment of their relationships with others. For him, the most effective way to reduce tension between groups was contact between their members, but hard experience, for example, in seeking to ease racial tension in the Deep South of the United States taught that simply bringing individuals from the groups together was insufficient to effect change. Three conditions, Allport concluded, had to be met before prejudice between could be reduced: equality of status between the groups; group members working towards common goals; and cooperation during the contact. Hewstone and Brown (1986) added three other conditions with particular reference to

interprofessional education: positive expectations by participants; successful experience of joint working; and a focus on understanding differences as well as similarities between themselves (see p. XX).

Hewstone and Brown (1986) also identified the essential aspects of stereotyping, which application of contact theory is intended to modify. Individuals are categorised during the stereotyping process. Attributes are then ascribed to members of that category. Everyone who belongs to the group is then assumed to be similar to each other and different from those in other groups. Out-groups tend to be seen as homogeneous but in-groups as more diverse. Stereotypes also set up expectations of behaviour. Disconfirming evidence tends to be ignored, but confirming evidence to be remembered. Contact situations can therefore become self-fulfilling prophecies, which may explain why contact alone is not enough to change individuals' attitudes towards members of other groups.

A more complex formulation is needed to relate attitudes to behaviour (see Chapter 6) where attitudes are exposed and challenged in face-to-face encounters with clients and with colleagues from other professions. We have found it helpful to apply work by Eagly and Chaiken (1993), which leads us to suggest that conditions deemed necessary for the *contact theory* to take effect have to be augmented before behaviour will change. The extended list then needs to be tested, either in college by simulating practice or in the workplace, to establish whether behaviour is modified.

A number of other theoretical perspectives from social psychology related to individual and group identities illuminate processes associated with interprofessional education.

Help in understanding the significance of identification with ones own group (or profession) rather than another group (or profession) comes from *social identity theory.* This theory includes an interpersonal, inter-group dimension where a person's behaviour is determined by individual characteristics at one end of the spectrum and by the group to which he or she belongs at the other (Tajfel and Turner, 1986; Ellemers et al., 1999).

Brown and Williams (1984) identified three models of s*ocial identity theory*:

- *The Decategorisation Model*, which plays down distinctions between groups and their members during inter-group encounters
- *The Common Group In-group Identity Model*, which establishes a super-ordinate group to which members of the previously competing groups can join
- *The Salient Category Model*, which maximises the group nature of contact as opposed to the personal

Choosing between these models is critical in distinguishing between intended outcomes from interprofessional education insofar as it seeks to change professional identity.

Should interprofessional education:

- Play down uniprofessional identities?
- Promote a supra-identity as health professions to which uniprofessional identities become secondary?

- Reinforce and utilise uniprofessional identities?

Emphasis on one or more of these may differ between interprofessional education programmes, but inclusion of the last is essential as included in our formulation of interprofessional values in the last chapter.

Building on *social identity theory*, *self-categorisation theory* (Turner 1999) retained the focus on self and group identity, but perceived them as lying along a continuum. Turner asserted that it was a mistaken assumption to think that *social identity theory* directly equated in-group bias with aggression between groups. The relationship was more complex involving, among other factors, the social (or health) context as a possible mediating variable. This perspective is an antidote to oversimplified formulations of inter-group relations introduced, in our experience, into interprofessional education. It points to the need to understand groups or teams, and relations between them in their organisational context.

Social Identity theory also bears comparison with *realistic conflict theory.* It proposes that inter-group attitudes and behaviour reflect the objectives that each hold in their shared relationships. Where groups hold divergent objectives they will have hostile and discriminatory inter-group relationships. Conversely, where groups have common objectives conciliatory behaviour between groups will emerge (Brown et al., 1986; Spears et al., 1997). This theory shifts the emphasis from the identity of the members to the objectives of the group. It signals the need for interprofessional education to address the varying objectives that members believe that the group should have.

Three other social psychology theories – *social exchange theory, cooperation theory* and *relational awareness theory* – also focus on the development of the individual for collaborative practice, but take a different perspective from that explored so far.

The realisation that exchange carries meaning beyond its market value for the participants prompted social scientists to formulate *social exchange theory*, which argues for reciprocity in social relations, a calculation of return. The success of an exchange, for example bargaining or negotiating, is seen to be dependent either upon benefit to the parties or to a third party. There is therefore often an element of self-interest, but also the incurring of obligation or indebtedness (Challis et al., 1988).

This theory may help practitioners to look beyond the immediate consequences of their interactions with other professions to take into account their longer-term implications for themselves and for their professions. It may be employed in interprofessional education to cultivate an understanding of how collaborative relationships are created and maintained between individuals and between groups.

Believing that only cooperation will ensure the survival of the species, Axelrod (1984) sought the conditions that would make it possible between self-interested egoists in a complex world. He called this *cooperation theory* into which he introduced *games theory,* as used for example by Rowley (1994) in interprofessional learning materials in community care. This is a mathematical theory setting out the optimum choice of strategy in conflicts of interest. The parties do better, according to these theories, by cooperation than they do by working alone. Defection from an

agreement brings retaliation. Knowing that they will meet again, said Axelrod, leads participants to conclude that, unless there is cooperative behaviour by both parties, there will be loss to the overall enterprise and to the parties themselves. This last proposition clearly applies within a team, but not necessarily in more ephemeral and more diffuse working relations where behaviour may be less constrained by the prospect of renewed contact.

Relational awareness theory developed from research and consultancy with health care teams by Drinka et al. (1996) helps to explain when and how the behaviour of members changes under different conditions. They analysed the individual motivational styles of team members by profession. The predominant motivational style of members was "altruistic-nurturing" under normal conditions, but "analytic and autonomizing" under conflict conditions (page 51). Interprofessional education that promotes learning about these styles and associated conditions can help participants to understand their own behaviour and that of others in their teams and prompt action to control the working environment to reduce the risk of counterproductive behaviour.

Perspectives from dynamic psychology

A similar perspective to *relational awareness theory* comes from psychodynamic theory, namely *social defence theory*, exemplified by Menzies (1970). She found that nurses who normally collaborated well with other professions became defensive at times of anxiety when they were working under stress, withholding collaboration and working according to prescribed procedures. Denial, splitting and projection were the key mechanisms in play, whereby the other, be it junior or senior nurse, would be held responsible for the workers' inability to relieve the pain and suffering of the patients. Obholzer (1994) later identified the same mechanisms at work in interprofessional relations, where managers or doctors were the target of projections that could impede collaboration.

Box 9.1 provides an example of an interprofessional initiative that drew upon this theoretical perspective.

An in-depth analysis of a child protection course at the Tavistock Clinic explored dynamics underlying group interactions. Child protection, it was found, evoked deep and powerful feelings as the children affected were vulnerable. It was all too easy for the workers in this field to experience feelings such as dependency, confused sexual responses and anger which surfaced during the course and interfered with learning. Interprofessional tensions emerged as one way of dealing with the discomfort evoked, nurses frequently becoming the repository for negative projections. To deal with these challenges, both the learners and the facilitators needed to be mature enough to acknowledge the areas of conflict and the underlying dynamics, and to learn from the process involved.

Box 9.2: Understanding underlying feelings. (Trowell, 1994)

Social defence theory has been invoked in interprofessional education (e.g. University of Westminster 2004), on the one hand to help participants understand their own and colleagues' behaviour under stress and, on the other hand, to reaffirm the need for a safe and comfortable learning environment to mitigate or contain anxiety and stress

where participants can open up and productive working relationships can be generated.

Another psychodynamic perspective introduced into interprofessional education is *loss and change theory*. Stress may be generated where interprofessional learning results in loss or change in professional identity (Atkins, 1998 quoting Marris, 1986) which may in turn generate resistance, strained relationships or defensive behaviour. Box 9.2 offers an example of how *loss and change theory* was incorporated into the evaluation of an interprofessional education programme.

Marris' theory of loss and change was used in an evaluation of interprofessional workshops for staff caring for older adults in London. The study found that, although participants enjoyed the sessions, they reported that their participation had not altered the way they worked with either their colleagues or patients/carers. Based on Marris' theory, the researchers argued that lack of impact in changing practice could be attributed to resistance due to unconscious feelings of anxiety connected with possible change.

Box 9.2: Coping with anxiety, loss and change. Holman & Jackson (2001)

Perspectives from sociology

Three sociological theories illuminate further the utility of theory in understanding interprofessional education. The first of these, *practice theory*, introduced by Almas (2004), taken from Bourdieu & Passeron (1990), helps to understand the processes by which entrants to the health professions come to hold a collective identity through 'common learning'.

Capital, especially cultural capital is viewed as a product of education by which the person becomes cultivated, acquires the ability to talk and move within the community where that culture is performed and appreciated. It includes a set of prevailing values, traditions and competence. Each profession, and each of its schools, has its own cultural capital. Identity is the meeting between culture and self.

Central to Bourdieu's work is the concept of *habitus* - a system of 'dispositions' allowing individuals to act, think and become oriented in the social world. *Habitus* is the product of social experience, acquired not inherent, a disposition to act in a particular way. It internalises the principle of cultural arbitrariness learnt from socialising agents like teachers and mentors.

The application of this theoretical perspective has yet to be fully developed in relation to interprofessional education and collaboration, but it promises to provide a much needed environmental context to complement the progress made in applying interactive learning methods.

Identity is closely akin to self-image. *Self-presentation theory* (Goffman, 1963) is therefore a helpful adjuvant to this discussion. According to Goffman, individuals present themselves to others by over-communicating gestures that reinforce their desired self-image and under-communicating gestures that they wish to detract from their self-image. He called this 'impression management'.

He also distinguished between front stage performances', e.g. meetings between colleagues or consultations with clients, and 'back stage performances', e.g. interactions with family and friends. The front stage is more formal and more restrained in nature. The back stage is more relaxed with opportunities to step outside front stage character and where individuals could prepare for their front stage performances. Adopting Goffman's perspective, interprofessional learning may be more effective when it generates informality and friendship conducive to back stage performance complemented by front stage performance in practice or on placement (Reeves, 2005).

Negotiation theory (Strauss, 1978) is another useful sociological perspective, which holds that formal roles are generally applied flexibly as individuals engage in trade-offs between their personal goals, those of others and the formal rules of the organisation.

Application of this theory becomes more complex when negotiations are interprofessional and/or inter-organisational as well as interpersonal. It has been applied in health care settings to explain how negotiations have shaped the nature of interprofessional relations between doctors and nurses (Svensson, 1996; Allen, 1997). It was also used by Reeves (2005) to help explain how processes of negotiation were employed between project steering group members and their students during the development and delivery of a practice-based interprofessional education programme. This study revealed the role of negotiation in the process of discussion and bargaining that occurred between members and their senior managers. Negotiation, in the form of reflective team discussions, was found to be vital in shaping the collaborative work of the students who participated in the programme.

Focus 2: Cultivating group/team collaboration

The discussion above has shown how theories focusing on the individual nevertheless help also to understand behaviour between groups. We turn now to theories which focus on collaboration within the group, as distinct from between groups. These perspectives may help participants to understand better the group or team within which they are learning or working and help teachers in creating conditions favourable to such learning.

Work-group Mentality Theory

Bion (1961) identified two forms of group functioning from a psychodynamic perspective, one where a group is addressing the task at hand, which he called 'work-group mentality' and the other where a group is avoiding such a task, which he calls 'basic assumption mentality'. *Work-group mentality theory*, as it is known, has provided a powerful tool for analysis of groups and organisations that malfunction where they are unable to deal with what Bion called 'primary task', i.e. the central task on which the group has consciously agreed.

Amongst others, Stokes (1994) has extended this analysis to interprofessional relations. He suggested that interprofessional team meetings can frequently be wasteful of time, where no decisions will be reached as a false sense of collaboration prevents members from tackling potentially difficult issues.

The experiential workshops entitled *Pride and Prejudice* offered at the University of Westminster (see Box 5.12, Chapter 5) have a group dynamic format. The focus is on group functioning, but specific emphasis is placed on allowing the participants to reflect on unconscious forces that shape interprofessional relations. It is not unusual for the doctors or police officers to become the focus of anger, for what appears to be lack of progress in the group – according to Bion a fight or flight basic dependence mentality comes into action if and when this occurs. The task of the group facilitator is to highlight such dynamics that tend to be mobilised, with the intent that the participants would then become sensitive to these forces in their own workplace.

Group Development

Another perspective, this time from social psychology, is *group development theory* collated from numerous sources by Tuckman (1965) which explains how groups progress over time during four stages:

- **Forming** characterised by ambiguity and confusion as the group struggles to begin to work together
- **Storming** when friction is generated between members as they begin to adopt roles and to negotiate how they can work together
- **Norming** as members work towards a consensus about the division of labour in the team
- **Performing** as members understand one another and work together in a well co-ordinated fashion

In a later paper, Tuckman and Jensen (1977) added a fifth 'adjourning' stage when the task has either been completed or membership is disrupted.

Applying this model, relationships between learners during an interprofessional education programme need especially to be addressed during the first three stages before effective co-working can be achieved during the fourth.

Support for this perspective in the teamwork literature comes from Øvretveit (1997) who said that teams needed to spend time undertaking preparatory work, making opportunities to discuss and agree how they are going to work together in an effective, efficient and mutually satisfying manner. An important outcome of this preparatory work is the development of a team policy, which should explicitly record the collective aims, roles and responsibilities of the members. For Øvretveit on-going discussion within the team is required to ensure that the policy is regularly updated and amended if, for example, a new member joins or there is a need modify a previously agreed policy.

West (1996) argued that time spent together reflecting upon collaborative work can ensure that the team becomes 'reflexive', integrated and better co-ordinated.

> "Reflexivity involves the members of the team standing back and critically examining themselves, their processes and their performance to communicate about these issues and to make appropriate changes (p13)."

The development of a reflexive approach within a team, said West, could help ensure that members became more able to adapt, respond to change and work together in a more effective and efficient manner. A key aspect to achieving a reflexive approach

was the creation of an environment where members valued one another's contributions, felt safe to openly share their ideas and trusted each other as they acknowledged their shortfalls and mistakes. While West noted that the development of a reflexive approach to teamwork entailed both time and effort by members, the benefit gained from this input was worthwhile.

Team Learning

The notion of the learning team has been developed from that of the learning organisation (Senge, 1990) (as discussed below). Such a team synthesises theories from adult learning and group dynamics, seeing individual learning as necessary, but collective learning as essential for an organisation to survive and flourish. The learning team moves beyond teambuilding as a linear progression towards a predetermined goal, making realistic allowance for chronic instability in many teams. It protects 'process time' to reflect upon what is going on within the dynamics of the group and to explore the wider significance of matters in hand.

Dechant et al. (1993) presented a model of team learning in industry. They acted on the guiding assumption that teams rather than individuals were the main learning units in modern organisations. Individual learning was necessary but not sufficient for organisations to survive and flourish. Their model takes into account instability as team members come and go. Bond (Bond, 1999; Bond and Hart, 1998) applied the work of Dechant et al. to teams in the UK National Health Service.

Acknowledging though they did that there was no substitute for practice experience, Hart and Fletcher (1999) argued that learning how to change was immeasurably enriched when combined with theory. It was better, they contended, to use a flawed theory critically and with discrimination than none at all.

However well motivated the members may be, team learning does not arise spontaneously, but in response to systematic endeavours by teams to improve their work characterised, according to Jackson and Burton (2003), by:

- good communications
- peer support
- peer learning
- shared values
- an appropriate mix of learning opportunities
- some learning driven by members' needs and met within the team
- some learning taking place outside the team and disseminated within it
- learning resources, e.g. access to libraries
- protected time for learning

Box 9.3 gives an example which develops a learning team as a vehicle for interprofessional learning.

> A newly created primary care team near Cambridge, England, comprised, in addition to GPs and nurses, a pharmacist, a Well Family Service co-ordinator, a service development manager, a research and learning officer, a patient participation co-ordinator, an information technology co-ordinator and administrative staff.

Many were attracted by the chance to develop new approaches to practice, but developed doubts about their ability to handle their new roles, especially that of nurse practitioner. One-to-one discussions were arranged in an attempt to understand the problems and relevant training opportunities identified and mobilised.

Team members were encouraged to maintain strong and continuing links with their respective professions, reinforced by external mentoring from that profession.

Potential conflicts resulting from allegiances and accountability outside the team were addressed by canvassing the views of 'partner employers' to understand better their expectations. A 360-degree reflective development process encompassed some of the appraisal requirements operated by these external partners within the one developed for the practice.

Problems rarely presented themselves clearly. Undercurrents of concern and discomfort were identified which called for teamwork towards closer understanding.

Box 9.3: Establishing a learning team. (Bateman et al, 2003)

Learning in teams can be valuable, but weakened when it assumes idealised notions of teamwork grounded in stable, enduring and cohesive working relations which may be the exception. Many teams in health and social care settings are inherently unstable, while many workers are required to work in situations which fit neither the traditional notion of teamwork nor of networking (Engestrom et al., 1999 - see below).

Focus 3: Improving services and the quality of care

Turning finally to the third focus, we begin with a discussion about systems theory as an approach to understanding the interrelated nature of individuals to their social environments. We then go on to consider the learning organisation as vehicle for interprofessional learning as a change agent before discussing theories behind two important processes – Total Quality Management (TQM) and Continuous Quality Improvement (CQI). Finally we explore the potential use of activity theory which, still early in its formulation, promises to understand change in a more comprehensive manner

Systems theory

Von Bertalanffy (1971) and his successors developed the concept of 'system' as an antidote to the limitations of specialist disciplines in addressing complex problems. It could be applied across all disciplines from physics and biology to the social and behavioural sciences, seeing wholes as more than the sum of their parts, interactions between parties as purposeful, boundaries between them as permeable, and cause and effect as interdependent not linear. The underlying philosophy of *systems theory* is the unity of nature, governed by the same fundamental laws in all its realms. Intervention by one profession at one point in the system affects the whole in ways that can only be anticipated from multiple professional perspectives.

The biopsychosocial model is an application of systems thinking developed by Engel (1977) which relates the whole person to his or her environment. It bears comparison with the notion of holistic care often incorporated into interprofessional education as the ideal to which collaborative practice aspires.

Systems theory has multiple applications in interprofessional education and practice. It offers a unifying and dynamic framework within which all the participant professions can relate person, family, community and environment, one or more of which may be points of intervention interacting with the whole. It can also be used to understand relationships within and between professions, between service agencies, between education and practice and between stakeholders planning and managing programmes. *Systems theory* can offer diverse perspectives on interprofessional education and practice.

The learning organisation

Interprofessional (and uniprofessional) learning may occur during everyday work, but it is often inaccessible and liable in consequence to be devalued or discounted. Learning organisation theory not only sheds light, but also encourages organisational development and management styles that encourage such learning.

A learning organisation fosters a culture of questioning and enquiry. It is innovative with facilitative leadership (Anderson, 1992), proactive, capable of continuous change yet retaining its specific identity (Swieringa and Wiederma, 1992), reframing information as learning and adopting a cyclical process of change. A learning organisation respects workers' differing roles, experience and expertise, and values them as learning assets, mobilising its own capacity to respond to learning needs from its internal teaching resources while recognising its limitations, bringing in college and freelance teachers when needed and valuing the distinctive qualities of extra-mural learning by making provision to release staff to attend courses. It responds as a good employer to the needs and expectations of the worker, within and beyond his or her present post, as well as those of the organisation.

The organisation facilitates the learning of all its members and continuously transforms itself (Garratt, 1990) through a process-based definition which rests firmly in the social – emotional area with none of the traditional hard edges of management. It is more than just doing a lot of training: it is a free-flow of learning and information dependent on satisfying the following five conditions:

- A perception of learning as a cyclical process
- An acceptance of the different roles of policy, strategy and operations within the organisation
- Free flowing information
- The ability to value people as the key asset for organisational learning
- The ability to reframe information at strategic levels: first and second order change.

The concept of the learning organisation developed from *organisational theory* which included the idea of double loop learning. Single loop learning for Argyris and Schön (1974, 1984) was part of the traditional behaviour pattern designed to enhance an individual's position and progress in competition with others. Double loop learning was appropriate in a changing environment which required a flexible response that only the co-ordinated and committed action of a team or organisation could produce. It should be conducive to creating a professional (or interprofessional) community which undertook explicit, public and cumulative learning.

Double loop learning, added Brown and Sommerland (1992), entailed learning-in-action to explore organisational norms through collaborative enquiry, moving away from 'espoused theories' which represented a publicly acknowledged and accepted set of propositions. Education and training within a learning organisation was:

- A continuous learning process
- Essential for organisation survival
- Linked to organisation strategy and organisational goals
- On-the-job plus specialist courses
- Line managers' responsibility
- Tolerant of risk taking and mistakes.

The dynamics of the learning organisation are informed by behavioural and social psychology. Lewin (1952) identified three stages:

- unfreezing - creation of motivation to change
- moving - developing new attitudes, values, beliefs, and behaviour patterns on the basis of new information obtained and cognitive redefinition
- refreezing – stabilizing and integrating new beliefs, attitudes, values and behaviour patterns into the rest of the system

Management mechanisms can set the learning agenda. At best, performance appraisal creates a positive opportunity to identify the learning needs of both individuals and groups. So too can clinical governance, as introduced in the UK, when it exposes shortfalls in services which call for more skilled workers to effect improvement.

The whole workforce stands to benefit in a learning organisation, including those workers deemed to be professionals. Such an organisation generates the conditions under which interprofessional education learning can flourish in the workplace.

Total Quality Management

Effecting organisational change has been made more systematic by the application of two related theories of which TQM was introduced first. TQM (Morgan, 1997; Oakland, 1993) originated in manufacturing industries, but has been adapted for service industries.

Its essential requirements have been summarised by Kogan et al. (1991) as:

- Corporate planning – medium to long-term
- Staff commitment throughout the organisation
- Breaking down barriers between departments and professions
- Continuous redefinition of targets and standards
- Identification of the customer
- Facilitation and co-ordination
- Commitment to continuous monitoring and evaluation of progress
- Balancing input costs against effectiveness
- High quality information systems
- Valuing all staff and their contribution to change
- Education and training

Box 9.4 provides an example of a TQM initiative that included interprofessional education linked to improving the quality of care delivered to patients based in three hospital departments

Three departments - surgery, anaesthesiology and operating room services - based in a hospital in Kentucky combined to implement a TQM initiative to enhance the delivery of patient care. Initially staff received interprofessional training to develop their understanding the TQM approach and it application. Following this training staff formed two project teams. Project team 1 examined hold-ups linked to patient care activities that occurred in the area where patients waited for their operations. Project team 2 studied the delays that occurred while patients were evaluated for surgery in the out-patient clinic. Both teams created mission statements focused on how they would re-organise their working practices to reduce unnecessary delays and therefore improve patients' experience while in hospital. Data collected following the implementation of the TQM initiative found that patient delays in both areas were reduced. Despite these successes, it is noted that a number of difficulties were encountered during the implementation of this change programme. It was found that staff, in particular the surgeons, were initially resistant to the changes proposed in the TQM mission statements. Nevertheless, it was pointed out that the involvement of professional leaders and the use of regular updates on implementation process helped overcome these early challenges.

Box 9.4: TQM in three hospital departments. (Townes et al., 1995)

Continuous Quality Improvement

We found more examples of CQI in our review than of TQM. The operational differences between them may be subtle. CQI, said Wilcock et al. (2003), is a set of principles and methods that enables people to improve the processes and systems within which they work. At its core is the use of knowledge to identify changes, plan and assess outcomes. Its distinctive feature is the development of a framework which can be used by practitioners in their everyday work to produce improvements which they themselves considered relevant to their clients.

The CQI process is a PDSA cyclical – plan, do, study and act. The 'trick' is to attempt small changes which can be made quickly followed by more difficult ones progressively.

See Box 5.14 (Chapter 5) for an initiative in an Australian Children's hospital designed to improve the care of children with acute asthma, Box 4.3 (Chapter 4) for a CQI initiative aimed at enhancing the delivery of pain relief to paediatric patients in a US hospital and Box 6.11 (Chapter 6) for an initiative that improved the quality of care to patients at a general practice in Salford (UK).

Interprofessional learning within an organisation becomes more purposeful, more systematic and more sustained where methods such as TQM, CQI and collaborative inquiry (see page X) are employed.

Activity Theory

Albeit encouraging rigour and logical progression, TQM and CQI are typically employed in health and social care to effect small scale change rather than intervention designed to effect wide-ranging systemic change. Activity theory promises to go further. It is a means to understand and intervene in relations at micro and macro levels applicable to effecting change in interpersonal, interprofessional and inter-agency relations, developed by Engestrom (1999a and 1999b; Engestrom et al., 1999).

Engestrom developed Vigotsky's (1978) concept of mediation in a triangle of individual relationships – subject, object and mediating artefact – to examine systems of activity at the macro level of collective and community in preference to the micro. He introduced community, rules and division of labour into the activity system, interaction between them becoming the focus for analysis.

Joint activity, not individual activity, is the unit of analysis in activity theory with instability (internal tensions) and contradiction the motive force for change and development (Il'enkov, 1977). Mediated activity not only changed the object but also the environment. The reflective appropriation of advanced models and tools were presented as ways out of internal contradictions that result in new activity systems.

Activity theory is still evolving, but may prove to be a significant advance beyond TQM and CQI to instigate major strategies for change, provided that its language can be translated and tools developed which managers and practitioners can employ.

Discourse Analysis

Less explored than it merits in interprofessional education, *discourse analysis* holds much potential.

We began in Chapter 1 by discussing differences in language widely held to account for failures in communication between professions, but questioned whether semantics alone were an adequate explanation and finding *discourse theory* helpful. The better discourse is understood, the more its pervasive and often hidden influence on interprofessional and inter-agency relations may be understood.

Discourse analysis is, however, a complex concept (Van Dijk, 1997) capable of a number of applications in interprofessional learning and working. On the one hand, it draws on the Anglo-Saxon tradition of linguistics as means of representation where the analyst is concerned with structures to account for meanings that might be culturally or situationally determined. On the other hand, it belongs in the continental European social science tradition as a phenomenon that takes on an active role in interpersonal and wider societal interactions. We find it helpful from both perspectives.

From the first, tension and sometimes conflict between professions may be analysed in terms of failure to understand each other's discourses. Relations may improve where one profession comes to understand better the discourse employed by another. This is most apparent where practitioners from one profession work with another on its territory. For example, the social worker out-posted to the psychiatric clinic not only acquires relevant specialist knowledge, but also facility in understanding and contributing to discourse typically initiated and controlled by the psychiatrist. A mark

of interprofessional maturity may be the degree to which the social work is also able to introduce his or her discourse as an aid to mutual understanding.

Interprofessional education creates opportunities for participants to become more alive to differences in discourse and the problems that they can generate. Each profession may become more aware of its own discourses and how they are received by others, to learn to check the comprehension of those others when necessary and to develop the interpersonal and interprofessional skills to employ alternative discourses.

Interprofessional education generates its own discourses, during planning and teaching and through it burgeoning literature of which this book and its accompanying volumes (Freeth et al., 2005; Meads and Ashcroft et al., 2005) are some of many examples.

Adopting the second perspective, the analyst looks for the role and function of discourse, how it positions parties in the communication process and what impact it has on the outcome of the interaction. The context is social and organisational, the focus what the parties bring to the interchange within it.

Foucault (1972) has developed a concept of discourse that represents a subtle and continuous interplay between the language, the means of communication and the context in which it is employed. Fairclough (1992) has operationalised this concept as an analytic tool which Koppel (2003) used to uncover prevalent discourses in continuing professional development and interprofessional education. Koppel demonstrated how three main discourses shaped the thinking and behaviour of the main parties in the education field, namely the discourses of management, professions and education.

For example, Koppel (2003) observed the interaction between representatives of education providers and practising professionals for nursing, health visiting and general practice with health authority managers and advisers to review current provision of post-qualifying education and to share ideas for new educational developments. The agenda was driven by the Health Service managers, who held the purse strings. Nursing representatives expressed anxiety that funds would be siphoned off from their uniprofessional courses, but not GP representatives whose funding was not threatened. Koppel saw this situation as exposing the conflict between management discourse, manifest in the intent to drive the change agenda through control of funds, and professional discourse, that values independence.

Discourse analysis provides a tool with which to analyse processes of exchange between organisations, taking into account their cultures and power. Active at all levels, discourse:

- shapes individual thinking;
- finds expression in team or group interaction, during a struggle to find common ground; and when common action is mediated through discourse;
- defines organisational culture that creates its own discourse with explicit and implicit rules and values

Relating theories to foci

Although the theories that we have presented in this chapter can be assigned to our three foci, many, as we noted at the outset span, two or all three. Figure 9.1 summarise.

	IPE focus		
Theory	Preparing individuals	Cultivating group/team collaboration	Improving service/quality of care
Adult learning	×	×	
Contact	×	×	
Social identity	×	×	
Self-categorisation	×	×	
Realistic conflict	×	×	
Social exchange	×	×	
Cooperation	×	×	
Relational awareness	×	×	
Social defence	×	×	
Loss and change	×	×	
Practice	×	×	×
Self-presentation	×	×	
Negotiation	×	×	
Work-group mentality	×	×	
Group development	×	×	
Team Learning	×	×	
Systems	×	×	×
Learning organisation	×	×	×
Total Quality Management	×	×	×
Continuous Quality Improvement	×	×	×
Activity	×	×	×
Discourse analysis	×	×	×

Figure 9.1: Relating theories to foci

Towards a general theory of interprofessional education?

Some readers may be impatient to formulate a general theory of interprofessional education; others may question whether one can ever be formulated in the absence of an overarching theory of education.

For Eraut (1994), professional knowledge is a conglomerate of theories, practical knowledge and skills combined with personal beliefs. For Usher and Bryant (1989), it rested on shaky theoretical foundations, drawing on academic disciplines such as sociology, psychology and philosophy each of which is in a state of turmoil and offered a competing paradigm or perspective. They questioned whether it was possible to find or formulate a respectable scientific theory beyond the immediate circle of its exponents.

Approached thus, any attempt to establish a general theory of interprofessional education reliant on an admixture of behavioural and social sciences is doomed to failure. We argue strongly that such a complex field, where different groups of learners meet for a variety of purposes at different stages of their professional development, no single theory will suffice.

In conclusion

Despite ambivalence, the theoretical base for interprofessional education is being assembled: new perspectives are being brought to bear casting existing ones in a fresh light. Teachers are invoking theories from their respective disciplines in an attempt to elucidate interprofessional education in terms to which they can relate and to inform learning about interprofessional practice by their students. Helpful though this can be it becomes problematic when the claims of one discipline or one theory are pressed at the expense of others. In our view, no one perspective should take precedence. The task, as we see it, is not to apply theory to practice, but to employ theory derived from education and practice to understand better the relationship between them. Theory then becomes an aid to reflection.

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Paper D2

Reconciling values

Chapter 8

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Chapter 8
Reconciling Values

Values are implicit in many of the themes running through preceding chapters, some of which we make explicit in this chapter. Reference to values was almost invariably lacking from studies in our review. We have therefore called on sources from the wider literature. These include: values in the development of interprofessional curricula; sociological critiques of the professions in contemporary society; and moves to establish common values for health and social care which we complement with our own attempt to draft a value base for interprofessional education.

Reframing attitudes as values

There is more in the interprofessional literature about attitudes than about the values that prompt them, attitudes which nonetheless value or devalue the object of their attention. Intelligent collaboration invites critical appraisal of other professions as partners, appraisal which may be well judged or prejudiced. Recourse to negative stereotypes can be seen as the means by which one profession characterises (or caricatures) another with intent to detract and devalue.

Oppenheim (1992) suggested that values are deeper and more enduring than attitudes or opinions and of a higher order in the human psyche. They are more persistent, laid down earlier in a person's development and influence clusters of attitudes. Viewed thus, conflicting attitudes to the same object may be determined by differing underlying values.

Internalising values

Health and social care professions may, as we suggest later in this chapter, be closer to a consensus about a common value base than the following discussion might suggest, but account does need to be taken of differences in values held by different professions which influence their attitudes and behaviour played out in their collaboration with each other. In Chapter 3 we suggested that these differences could in part be attributed to the process of socialisation during pre-qualifying education as students identified with the customs, mores and traditions of their chosen profession. Values are internalised and espoused. Conformity is rewarded. Preferment goes to those whose attitudes, behaviour and values best exemplify those of their profession, albeit sometimes at the expense of other professions subjected to invidious comparison.

Interprofessional education works to redress the downside of socialisation. But it also respects the undoubted benefits of socialisation to practitioners, clients and public, imbuing a sense of worth (or value) for practitioners, enhancing self-esteem, cultivating professional identity and esprit (Becker et al., 1961; Melia, 1987; Sinclair, 1997) and protecting clients through standards reinforced by peer pressure. In turn, this invites the confidence of the public.

Powerful though the socialisation process may be in shaping values, the seeds of difference between professions may have already been sown before students enter their professional programmes by admission and recruitment policies. There are

established traditions in recruitment that widening access initiatives and valuing diversity will take time to alter.

Relative status, earnings and career progression, for example, differ between professions which have traditionally and predominantly recruited men or women (Hugman, 1991). Differences may be diminishing where professions long dominated by men, such as medicine, now recruit more women. This is accompanied by concern about the falling status of medicine, changes in retention rates patterns and calls for increased student numbers to accommodate these (Evans, Lambert, & Goldacre 2002; McMurray et al. 2002).

All professional programmes are based in values derived in part from the academic disciplines that contribute to their knowledge base. Professions mainly grounded in the natural sciences, such as physics and chemistry, are more likely to subscribe to the values of positivist scientific method, perceiving treatment as an intervention towards a pre-determined goal. Professions that draw mostly upon the social sciences, such as anthropology and sociology, are more disposed to recognise the value of knowledge from the interpretive and change paradigms where environmental and contextual understanding are privileged. These are, of course, generalisations. Diversity of epistemology is not only inter- but also intra-professional.

But to attribute value differences between professionals exclusively to their educational experience, without reference also to the relative strength and prestige of their professional associations and their relative status in the workplace, would be simplistic. Some associations are better endowed and enjoy more political influence than others, such as those granted the prestigious title of *Royal College* in the UK. Status and esteem in the workplace is influenced by remuneration and opportunities for career progression, but most obviously by conferment of autonomous practice and self-regulation, traditionally deemed to be the distinguishing marks of professions (Freidson, 1970; Johnson, 1972; Larson, 1977).

Value may also be accorded, although not necessarily equated with status, to those professions perceived by self and others as vocational. But professions act from dual motives, to provide service and to use their knowledge for economic gain (see, for example, Krause, 1996). Balancing these two, said Evetts (1999), was critical to interprofessional collaboration. Values associated with the vocational ideal may bond professions together, but may also be used to test whether another bears the hallmark of a profession.

Value differences within professions, for example between specialties, may be as great as between professions. Furthermore, values change in time and place as professions update them to reflect current social mores and subscribe to values in different countries in keeping with their cultures, customs, religions and political ideologies.

Exposing differing value perspectives between stakeholders

Value differences within interprofessional education may be greater between other stakeholders – policy makers, managers, professions, teachers, students, clients and regulatory bodies - than between the participants. Differences between stakeholders may become apparent in the values that they ascribe to themselves and to other

stakeholder groups during the joint planning and management of interprofessional education programmes. Atkins (1998) reminded all those engaged in interprofessional education of the powerful emotions evoked during its planning as much as its provision, especially the potential loss of professional identity engendering reactions of loss and grief which must not be ignored.

- *Policy makers*

Albeit rarely engaging directly in programme planning, policy makers in countries such as Canada, Finland, Norway, the UK and the US drive the interprofessional education agenda. Carrier and Kendall (1995) construed this as a device to introduce bureaucratic control over collaboration. Meads and Ashcroft et al. (2005), on the other hand, saw it as means to effect reforms in health and social care delivery whose implementation calls for flexible deployment of the workforce. Whatever the motivation, the influence of policy makers on interprofessional education is evident in official documents and earmarked funding.

- *Regulatory bodies*

Like policy makers, regulatory bodies rarely participate directly in programme planning. Their approval nevertheless needs to be secured before a programme can be delivered. Membership of regulatory bodies and their visiting panels differs between professions and between countries. Some may exclusively comprise representatives of the relevant profession, others a cross-section of stakeholders which may generate tension within a panel but also add credence to their judgements.

In the UK, all major regulatory bodies for the health and social care professions support interprofessional education in principle. Encouraging though that is, it does not ensure that assessment panels include members conversant with, and sympathetic towards, interprofessional education.

Underlying value constructs are thrown into a sharp relief, said Shakespeare (1997), when dual validation of courses is required. There is therefore a strong case for establishing agreed procedures and criteria where a programme requires approval by more than one regulatory body, based on the advice of a joint panel on which each is represented (as we elaborate in Chapter 8 of Freeth et al., 2005)

- *Service and education managers*

Service managers are often viewed as agents for the policy makers sharing much the same values. In accordance with their role, they necessarily put organisational values before the interests of particular professions and their members. They see interprofessional education not so much as a means to effect collaboration between professions based on traditional roles and boundaries, as to deploy the overall workforce flexibly. The agenda for interprofessional education becomes correspondingly more ambitious, with the attendant risk that resistance may be encountered if and when professions feel threatened.

Educational managers may look for ways to rationalise programme provision to gain economies of scale and to use scarce specialist expertise to optimum effect (Barr, 1994) influenced by the expectations of funding bodies. Like service managers, some may value professionalism writ large more than the individual professions, in which case they may be predisposed to look for commonalities across professions.

Managers who argue for a wider view of professionalism risk being seen, rightly or wrongly, by practitioners as anti-professional. If challenged, they may assert their support for professionalism per se while challenging seemingly restrictive practices between professions whose functions and boundaries have been historically determined and fail to equate with the needs of modern service delivery. They may also make the case for rationalisation to counter the proliferation of professions (as discussed in Chapter 1) in the interests of the workers as much as the delivery of services. Fewer and larger professions, they may suggest, will improve career mobility and progression, while a broader education will be more personally enriching for students. Far from antipathetic, such managers may present themselves as friends and allies, concerned to amalgamate the smaller and weaker professions into fewer and larger groupings in their own interests.

- *The professions*

Pirrie et al. (1999) like others (e.g. Freidson 1970, Larson 1977) saw professional associations as conservative, intent on maintaining and defending professional identity and culture threatened by blurring traditional boundaries and changing professional roles. That may drive professional institutions on to the defensive, but it is at variance, in our experience, with the positive stance towards interprofessional education and practice which many practising professionals and their associations seek to maintain. They may nevertheless need to be persuaded that interprofessional learning can and will reinforce profession-specific learning and that the case put for interprofessional education will benefit workers and clients as well as service agencies (see page X).

Each profession may protect its own members, but unite in arguing for education which is responsive to practice as well as policy. Asserting the values of practice may, however, devalue college-based education, adding credence to arguments that the only effective interprofessional education is in the workplace (see Chapter 9).

- *The Students*

It may fall to representatives of the professions to assert the value of a student focus, to help service managers to anticipate the point when staff are being released to, or recruited from, the programme being planned. It is they who may also need to remind educational institutions of their contractual obligation to each participant as student if and when this seems to be in tension with contractual obligations entered into with service agencies and funding bodies which emphasise workforce strategies and categories of worker rather than individuals. That will be easier if students are also included in the planning process, less so, in our experience, for them to be given a voice until the programme is operational and a consultative group has perhaps been installed. For example, the student voice helped to shape initial and continuing development of an interprofessional education programme in mental health at the University of York, UK (see Freeth et al., 2005, Chapter 1 and Box 18.1).

The Collaborative Practice in Mental Health module at the University of York in the North of England had a developmental evaluation strategy. Results from the formative evaluation were discussed by an Advisory Group of service users and providers, a carer, student and faculty representatives, a member of the university teaching and learning committee and an external advisor. By the third year, this

Group still included the student representatives from the first and second run of the module, by then practitioners able to reflect on the impact of their interprofessional learning on their practice.

The perspectives of these different stakeholders were pivotal in ensuring that the module aims remained relevant and were the driving force behind the teaching and learning arrangements. Their views have also led to changes, such as having fewer students in the working groups, whole day sessions to encourage attendance and enhanced information to students about the module's purpose. Work is now in progress to implement intra-modular collection of students' views and thus, where possible, to shape the module to the needs of the learners during its delivery rather than only making changes for the following cohort of students.

Box 8.1: Involving students in course planning and review. (University of York, 2004)

- *The organisations*

Allowance must also be made for differences in values, customs and culture between types of organisation from which the stakeholders are drawn: statutory, commercial and charitable; education, health and social care. Statutory bodies may be exercised about meeting legal obligations, commercial bodies with profit and voluntary bodies with advocacy and provision of specific services. Different organisational cultures can impede collaboration, for example between health and social care (Peck et al., 2001).

- *The clients and carers*

Much lip service is paid to involving clients and carers in programme planning and delivery, asserting the central value accorded to client centred care as much as their potential contribution to learning. Their involvement is, however, still the exception and often rudimentary, although Barnes et al. (2000a, 2000b) provided a good example where clients were an integral part of the programme development. Such involvement can be a powerful reminder of the need to focus on client-centred care and quality of practice at all times (Beresford and Trevillion, 1995), while perhaps making it harder for other stakeholders to indulge in disputes (see Freeth et al., 2005, Chapter 4).

Observing the planning process

Reeves (2005, forthcoming) observed the collaborative process between educational and clinical managers as they developed and delivered an interprofessional education initiative, as part of a two-year ethnographic study. He found that enthusiasm for interprofessional education facilitated positive group relations and supported the development and delivery of the initiative, but also resulted in a lack of critical analysis amongst members, which resembled the characteristics of groupthink. This, Reeves observed, resulted in ambiguity about respective roles, lack of debate between members about the development of the initiative and failure to undertake group maintenance activities, which undermined the quality of members' work together and generated tensions. Reeves also noted that external challenges, notably re-organisation in the hospital where the programme was due to be delivered, undermined the group's collaborative work.

These observations point to the need to include observation of the critical role of programme development in studies that seek to understand how competition, collaboration, conflict, collusion, and power are played out between stakeholders. Employers propose and colleges dispose. So says conventional wisdom, powerfully reinforced when employers hold the budget to commission education. But teachers can also exercise power born of an authoritative grasp of their subject. This becomes apparent where they have a more developed understanding of interprofessional education than do employers' representatives, although that may be challenged.

Responsibility for curriculum planning, within the agreed framework, is usually passed to the teachers from the participating professions. Common ground between them will almost certainly be commitment to practice. Beyond that, each may be predisposed to safeguard the interests of his or her profession. Those with practice experience (past or concurrent) bring to their teaching positive and negative experiences of collaborative practice with other professions. Unhelpful baggage should be set aside, but acknowledging differences born of past experience can also be used to heighten sensitivity to interprofessional tensions and inform teaching from which students can learn. All teachers need opportunity to explore value differences between their professions so that insights gained may be used to improve teaching, learning materials and programme development. We discussed such staff development in Chapter 7 and programmed development in Chapters 3 to 6 of Freeth et al., (2005).

Probing values during interprofessional education

It is a matter of judgement when, where and how to explore similarities and differences in values between professions during interprofessional education. In depth exploration may be more appropriate in longer college-led programmes with time and opportunity for reflection.

All education is value laden, including uniprofessional, multiprofessional and interprofessional education. It is hard to think of content typically included in interprofessional education in health and social care which is not. There is therefore no lack of opportunities to prompt participants to probe ethical dimensions, moral dilemmas and conflicts. This helps to make their values – personal and professional - accessible to comparison and debate. Examples include values prompting reforms in health and social policy internationally and nationally, including global policies for health enshrined in WHO papers such as *Health for all in the twenty-first century* (WHO,1998) grounded in equality and human rights, elaborated later further with specific global goals (WHO, 2000).

Participants may be prompted to debate the ethical and moral issues in subjects ranging from in vitro-fertilisation to euthanasia, from DNA testing to protection of privacy, and from respect for the client to the UN Declaration of Human Rights (United Nations, 1948). Underlying value differences are often brought into the open during such debates, but the most effective may be issues that arise naturally during teaching, and from practice learning or concurrent work experience.

Interviews with senior health care, police and social services personnel in an Accident and Emergency Unit in the Netherlands and the UK (Hunt and Van der Arend, 2002) returned recurrently to the following themes:

- information sharing and confidentiality
- consent
- professional values and autonomy
- human rights
- accountability
- policies and protocols
- staff safety
- public safety

Scenarios reported during interviews included: the youth with a stab wound unwilling to volunteer an explanation; reported rape where the victim does not wish the police to be informed; and the mentally disordered offender who poses a threat to staff. Few settings offer more compelling examples to engage students in many and varied ethical and moral issues.

Help may well be enlisted from the range of participant professions in planning the study of ethics and values in clinical practice as examples from the US and the UK demonstrate. The first two of these (see Boxes 8.2 and 8.3) suggest how teachers from each of the professions can contribute to curriculum development.

Teachers in Portland, Maine, for the seven professions to be included in a 15 week interprofessional ethics course were asked two questions:
- What content areas should be considered for inclusion?
- What design framework, format or structure would best fit the content chosen?

An interprofessional faculty design team conducted a comparative analysis of codes of ethics for the seven professions. It then grouped topics as responsibility to: the person, profession, client, health care team, employer, research and practice, and the public.

Throughout the course, videos, case examples and articles about ethical issues concerning the specific professions were utilised for discussion and decision making. Assignments moved participants along a continuum from profession specific projects to interprofessional projects.

Box 8.2: Involving seven professions in formulating ethical curricula.
(Stone et al., 2004)

Teachers at Oxford Brookes University in England used a nominal group technique to identify ethical topics to be included in seven uni-professional programmes including those that might appropriately be included in interprofessional education. All participants were taught ethics in health care during pre-registration studies by a visiting ethicist.

Seven core topics were identified for all professions:
- Ethical theory
- The professional duty of care, codes of practice and accountability

- Informed consent and client refusal
- Confidentiality
- The vulnerable patient
- Research ethics
- Rationing

Box 8.3: Identifying core topics in health care ethics. (Aveyard et al., 2005)

Two more examples (boxes 8.4 and 8.5) move beyond curriculum planning to show how teaching about values has been introduced into interprofessional education.

Eleven interprofessional ethics seminars were offered to staff working at two hospitals (one inner city, the other outer city) in and around London, England. The aim of the seminars was to improve participants' understanding of dilemmas arising from social and ethical consequences of advances in genetics and their impact on health care policy and practice. The programme was developed from a series of interviews with staff to understand their key concerns about the advancement of genetics in health care.

The seminars were facilitated by an ethicist who encouraged participants to debate critically, question and probe each other's comments and re-examine their assumptions in relation to the ethical issues of genetics. Fifty-six staff from a range of different professional groups including doctors, nurses, midwives, health visitors and psychologists participated in the sessions.

Interviews undertaken after the delivery of the seminars indicated that the participants enjoyed the sessions. They particularly enjoyed the time they had to learn from one another and reflect together on one another's personal and professional values in relation to genetics. In addition, participants felt that they had become more aware of each other's professional roles and responsibilities as a result of their involvement in the programme.

Box 8.4: Ethical consequences of advances in genetics. (Alderson et al., 2002)

Nursing, medical and divinity students took part in an interprofessional course in Rochester, New York, to explore religious responses to human suffering and to examine the role of different health care professionals with regard to spiritual concerns of clients.

Students identified symbols associated with their own and the other professions, recounted myths and re-enacted rituals which had social and emotional meaning for themselves and for their clients. Symbols associated with physicians included the stethoscope, with nurses the thermometer and the syringe, with clergy the stole and with counsellors the couch. Rituals associated with physicians included the physical examination and the pronouncement of death, with nurses the morning bath, with the clergy the laying on of hands and counsellors listening for 50 minutes.

Students teased each other: physicians had to "play God", nurses to be "bleeding hearts", clergy to be "Alices-in-Wonderland" or "Pollyannas" and counsellors "poker-faced clock-watchers".

Box 8.5: Religious and spiritual issues in health care. (Dombeck, 1989)

Comparing codes of ethics

Wilmot (1995) distinguished between ethical values found in formal codes in the literature (to which we now turn), in the theory base of the professions and in practitioners themselves, all of which could inform interprofessional discourse.

Interprofessional education may compare professional codes of ethics to identify similarities and differences in the values underlying these. Hewison and Sim (1998) provided a helpful starting point with their exploration of the potential in codes of ethics to help or hinder interprofessional working, balancing injunctions to collaborate with other professions against emphasis put on differences and demarcations.

Citing Wall (1995), they listed five principles generally found in codes of ethics:

- Respecting a person's individuality
- Endeavouring to do good
- Not doing harm
- Telling the truth
- Being fair

Three position statements have been reported so far, which invite health and in one case social care professions to subscribe to common values and ethics.

First, a group of Anglo-American scholars (Berwick et al., 1997, 2001) formulated a common ethical code to which they invited all health and social care professions to subscribe based on the following principles:

- *Rights* – people have a right to health and social care
- *Balance* – care of individual patients is central, but the health of populations is also of concern to the professions
- *Comprehensiveness* – in addition to treating illness, professions have an obligation to ease suffering, minimise disability, prevent disease and promote health
- *Cooperation* – health care succeeds only if professions cooperate with those served, with each other, and with those in other sectors
- *Improvement* – improving health care is a serious and continuing responsibility
- *Safety* – do no harm
- *Openness* – being open, honest and trustworthy is vital in health care

Second, a statement drafted for the UK Health Regulatory Bodies asserted that all health care professionals were personally accountable for their decisions and actions (UKCC, 2001).

They must be:

- Open with patients and clients and show respect for their dignity, individuality and privacy, and for their right to make decisions about their treatment and health care
- Justify public trust and confidence by being honest and trustworthy
- Act quickly to protect patients, clients and colleagues from risk of harm
- Provide good standards of practice and care
- Cooperate with colleagues from their own and other professions

Third, the United Kingdom Quality Assurance Agency for Higher Education (QAA, 2004) included the values for health and social care under the following headings in its draft statement of 'Common Purpose for Subject Benchmarks':

- Respect for clients' and patients' individuality, dignity and privacy
- Clients' and patients' right to be involved in decisions about their health and social care
- Justify public trust and confidence
- Set high standards of practice
- Protect clients and patients from risk of harm
- Cooperate and collaborate with colleagues
- Contribute, where appropriate, to the education of others

These statements suggest that reaching agreement about a common ethical code for all health and social care professions for consultation need be neither difficult nor protracted. Meanwhile, they offer excellent interprofessional learning material against which codes of practice for particular professions can be compared and contrasted.

Ethical critiques of health care, according to Irvine et al. (2002) frequently adopt one of a number of normative approaches – principle-based, consequentialist, deontological or virtue-based. While these may be appropriate when examining specific clinical issues, none, according to Irvine and his colleagues, provide a sufficient basis for understanding the complexities of interprofessionalism, which demanded an appreciation of the multiplicity of subject positions within and between health care professions.

Competing agendas for interprofessional education

What then should interprofessionalism be?

- A closing of ranks to safeguard collective self-interest in an age when professionalism and its claims to elitism and privilege are under threat?
- A coming together of professions to respond more effectively to the needs of their shared clientele, each voluntarily ceding some of its autonomy to realise more fully the altruistic values underpinning their common professionalism?
- A response to modernisation policies to reform the professions, countering the downside of professionalism which stands in the way of reform and the strengthening of public accountability?

The first of these propositions, in our experience, bears no relationship to the values which the interprofessional movement espouses. The second more accurately characterises the emerging interprofessional movement worldwide. The third demands more of interprofessional education than it can deliver alone, although it may contribute as part of a strategy of workforce reforms.

Interprofessional education must demonstrate not only that it can be an effective vehicle to resolve issues that divide professions, but also these competing perceptions about its very nature and purpose. At issue is whether interprofessional education, by resolving problems pertaining to its own identity, can modernise professionalism.

Different perceptions of professionalism and interprofessionalism, sometimes compounded by tensions between professions, are played out during programme planning and continue throughout its delivery. The common learning ethos exerts pressure to reconcile values as the parties find common cause, but comparative learning argues for honest acknowledgement of differences to be reconciled sometimes, to be tolerated at other times and to be built into the learning when helpful. The danger lies in overlooking the powerful influence of values, or in denying or fudging differences.

Establishing Interprofessional Education Values

Interprofessional education may be contested territory but, as the discussion above has shown, its learners, their professions and agencies all espouse values that impact on its effectiveness. It is timely for interprofessional education to establish a value base for its development, delivery and evaluation. In Chapter 2 we showed the links in the chain that leads from effective interprofessional education to partnerships in health. We developed that further in Chapter 3 with a model of interprofessional education that extended the linear concept into an interlocking and interdependent relationship between the individual, the collaborating team and the delivery of care and a service. Values of interprofessionality are essential to the harmony between these links and relationships. We suggest a framework for these built on values to inform the interprofessional learning environment and process, and built on three pillars: shaping the learning environment, perspectives taken in the learning process and concepts underpinning that process.

Shaping the learning environment

Androgological

Interprofessional education is based upon principles of adult learning including androgogy. It values what participants bring from their respective fields and from their life experience. It advocates interactive learning to equip participants with the knowledge, skills and attitudes to work independently and collaboratively and with the capability to know which of these modes of practice is in the best interest of clients in any given situation.

Professional

Interprofessional education values the contribution of each profession. It respects the need for division of labour, not least to accommodate growth in professionally-relevant knowledge. It seeks to protect and reinforce the integrity and identity of each profession, while recognising that boundaries must be permeable and negotiable in response to the changing demands and expectations of policy and client.

Pan-professional

Interprofessional education reaches beyond mutual respect in search of a definition of professionalism wider than any one profession or family of professions. It reinterprets the concept of professionalism in its contemporary context, taking aboard public

accountability, external control, the interface with management and client participation. It wrestles with the need to balance the general and the particular, the development of a broad based and flexible professional workforce and the preservation of the integrity of the constituent professions, whilst accepting the need for each to change in relation to the others.

Perspectives on the learning process

Client centred

Interprofessional education values the contribution of clients. Acting on the belief that good practice – professional and interprofessional – is client centred, it looks for ways to include clients and carers in developing, delivering and evaluating programmes, in assessment and as co-participants. It seeks to harmonise those values generated by professional socialisation and values underpinning the delivery of client care.

Holistic

Interprofessional education challenges compartmentalisation of the human condition according to predetermined specialities. It recognises the need to integrate mind, body and spirit, and person, family, neighbourhood, community, society and environment. It aligns itself with systemic practice with families and communities and with ecological movements.

Change-oriented

Interprofessional education seeks to make services better, prepared to embrace new approaches to service delivery and open to innovation. It recognises the value of service changes that enhance job satisfaction and improve recruitment and retention amongst all staff.

Concepts underpinning the learning process

Collaborative

Interprofessional education values collaboration over competition, but is realistic enough to know that they co-exist. It works to constrain and counter the harmful effects of excessive competition within a wider collaborative framework.

Inclusive

Interprofessional education errs on the side of inclusion. It is predisposed towards widening inclusion in collaborative education and practice, unless and until there are compelling grounds to the contrary. It recognises that the practice of all professions benefits from critical scrutiny by self and others and testing against evidence.

Equality and Diversity

Interprofessional education espouses equality and values diversity. It extends the application of principles of equal opportunities and anti-oppressive practice to relations between professions, encouraging mutual respect and parity of esteem as learners and seeking to reduce status differentials in the workplace. It celebrates difference, capitalising on the distinctive contribution that each profession and organisation brings. Accustomed to moving between professional cultures, exponents of interprofessional education are disposed to work between ethnic, religious and national cultures.

In conclusion

We have exposed in this chapter hidden and ill-documented value differences between professions and between stakeholders in interprofessional education in the belief that they must be acknowledged before they can be addressed and reconciled. We have, however, gone further, drawing attention to moves towards common values and codes of practice and suggesting key components to be included in the developing a value base for interprofessional education.

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